



University of Pennsylvania
ScholarlyCommons


Publicly Accessible Penn Dissertations

2019

From 'disengaged' To Digital: Latino Boys As Emergent Technology Experts

Carlos Ricardo Martínez
University of Pennsylvania, hyperopic@gmail.com

Follow this and additional works at: <https://repository.upenn.edu/edissertations>

 Part of the [Education Commons](#), [Ethnic Studies Commons](#), and the [Social and Cultural Anthropology Commons](#)

Recommended Citation

Martínez, Carlos Ricardo, "From 'disengaged' To Digital: Latino Boys As Emergent Technology Experts" (2019). *Publicly Accessible Penn Dissertations*. 3514.
<https://repository.upenn.edu/edissertations/3514>

This paper is posted at ScholarlyCommons. <https://repository.upenn.edu/edissertations/3514>
For more information, please contact repository@pobox.upenn.edu.

From 'disengaged' To Digital: Latino Boys As Emergent Technology Experts

Abstract

Anthropological research suggests that young Latino men face a complex set of cultural norms that can make it difficult to identify as experts in technology. In education research Latino boys have historically been framed in relation to deficit-perspectives. This dissertation provides an account of Latino boys as self-efficacious learners. I ask, a) how did a group of Latino boys integrate their cultural values and extant technology-related learning practices into self-directed digital literacy learning?; b) What pertinent social processes shaped their emerging sense of themselves as members of a group of digital literacy learners?; and, c) How did these emergent technology experts formulate narratives about their educational trajectories and imagined futures based on their technical and social practice skills development?

Over eighteen months, eight Mexican-origin middle school boys met in a community center technology room. Utilizing a critical ethnographic approach, I observed the boys self-directed digital literacy practices, including coding, 3-D drafting, and graphic design. I collected 55 hours of audio recordings, semi-structured interviews, and participant products, as well as producing field notes and analytic memos to reflexively evaluate emergent concepts.

The ethnographic accounts suggest a mode of social identity formation wherein the boys applied their cultural values and learning practices to self-directed endeavors. A pattern emerged in which the boys acknowledged the specialized skills of each other, and in turn, had their own forms of digital literacy expertise recognized. I contend the participants came to understand themselves and fellow group members as emergent digital literacy experts, developed communicative repertoires aligned with technologically proficient social identities.

This research contributes to scholarship in cultural anthropology, education/learning sciences, and Latinx studies. This research pushes the boundaries of critical ethnography by positioning the researcher as an activist-scholar. It focuses on how learners from non-dominant groups can develop identity trajectories in relation to their informal STE(A)M learning practices. And, it interrogates how a Xicanx researcher can participate with Latinx youth as a coordinator of dialogue, a navigator of educational spaces, and a colonizer valuing neoliberal ends/trajectories.

Degree Type

Dissertation

Degree Name

Doctor of Philosophy (PhD)

Graduate Group

Education

First Advisor

Kathleen D. Hall

Keywords

Cultural Anthropology, Foundations of Education, Latinx Studies, Learning Sciences, Linguistic Anthropology, Youth Studies

Subject Categories

Education | Ethnic Studies | Social and Cultural Anthropology

FROM 'DISENGAGED' TO DIGITAL:
LATINO BOYS AS EMERGENT TECHNOLOGY EXPERTS

Carlos Ricardo Martínez

A DISSERTATION

in

Education

Presented to the Faculties of the University of Pennsylvania

in

Partial Fulfillment of the Requirements for the

Degree of Doctor of Philosophy

2019

Supervisor of Dissertation

Kathleen D. Hall, Associate Professor of Education and Anthropology

Graduate Group Chairperson

J. Matthew Hartley, Professor of Education

Dissertation Committee:

Kathleen D. Hall, Associate Professor of Education and Anthropology

Nelson L. Flores, Associate Professor of Education

Amy Stornaiuolo, Associate Professor of Education

Stanton Wortham, Dean, Boston College Lynch School of Education and Human Development

Sofia A. Villenas, Associate Professor of Anthropology, Cornell University

FROM 'DISENGAGED' TO DIGITAL: LATINO BOYS AS EMERGENT TECHNOLOGY EXPERTS

COPYRIGHT

2019

Carlos Ricardo Martínez

For Jennie, con todo mi corazón.

And Alicia Cano Martinez & Luz Maria Cano, that their place in history be recognized.

ACKNOWLEDGMENT

I would first like to thank the boys I worked with, their parents, and families. I continue to learn from them and appreciate the trust they placed in me before, during, and after this project. I would also like to express my gratitude for the Penn GSE doctoral fellowship provided by Lee Spelman Doty, W'76, and George E. Doty, Jr., W'76. Their support made this study possible. It was Dean Stanton E.F. Wortham's work in a New Latino Diaspora town that led me to Penn. He was my original coyote, as Dr. Enrique Murillo might say. With his keen ethnographic eye and profound concern for his doctoral students, he shepherded me through many a treacherous doctoral studies borderland. I will always be in debt to Stanton for his patience and resolute belief in my ability as an anthropologist. I would not have completed this ethnography if not for the heartfelt mentorship and intellectual support of Dr. Kathleen D. Hall. I arrived at Penn as a K-12 ESL/Bilingual teacher, with an interest in documenting learning interactions via ethnography. Kathy suggested anthropological coursework and research, and in doing so shifted the course of my life in a rich and fulfilling manner. In these past several months of writing, she has provided a nurturing and academically rigorous opportunity to develop as a scholar.

My dissertation committee members, Dr. Sofia A. Villenas, Dr. Nelson L. Flores, and Dr. Amy Stornaiuolo have been edifying forces in shaping this ethnography. Their generosity of spirit in taking the time to provide insights and recommendations throughout the process improved it, and also modeled scholarly camaraderie and kindness. The communities that supported me at Penn were abundant. Dean Andy Porter first invited me to the prospective PhD students' weekend and provided a Dean's Scholarship. Dean Pam Grossman granted me opportunity to continue and complete this dissertation. Lois McNamara and Ann Tiao lent their expertise in navigating Penn, which

was indispensable as a first generation doctoral student. The Fontaine Society was the first space at Penn where I met other doctoral students from backgrounds like my own, and I deeply appreciate the efforts of the Division of the Vice Provost for University Life in creating and maintaining that space. In the Anthropology Department, Dr. Deborah A. Thomas, Dr. John L. Jackson, Dr. Asif Agha, and Dr. Theodore G. Schurr were very welcoming and integral in helping me develop the foundational tools necessary to become an ethnographer. Dr. Michael B. Katz (RIP) and Dr. Elaine Simon in the Urban Studies program taught me how to think about the myriad ways that communities and environments interact with and shape one another as I completed my graduate certificate in urban studies. Patty Lynn, of Penn Libraries, was a powerful resource in helping me discover and organize literatures across disciplines. Betty Deane has worked tirelessly to help me deliver this manuscript in its best possible form. And my Penn classmates: Christopher Pupik Dean, Roseann Liu, Gabriel Dattrean, Mariam Durrani, Arjun Shankar, Savannah Shange, Joshua Taton, Noam Osband, Kevin Burke, Woody Aguilar – among many others. I am proud to learn from and stand among you all. And Chike McLoyd (RIP), your revolutionary spirit lives on.

Beyond Penn there were several organizations that provided financial and academic support through these years. The American Association of Hispanics in Higher Education (AAHHE) welcomed me into their community of scholars as a Graduate Fellow. The Association of Latin@/Latinx Anthropologists (ALLA) provided opportunities for me to gain leadership experience. Dr. Stella M. Flores and New York University's Steinhardt School of Culture, Education, and Human Development granted me a Faculty-First Look Fellowship to prepare me for a career as a tenure-track professor. Dr. Victor B. Sáenz and The University of Texas at Austin's Project MALES recognized this work with an inaugural Graduate Scholar Fellowship. The Latino Men Pursuing

Doctorates Facebook group (modeled on the Latinas Completing Doctoral Degrees group) was a virtual space I created that took on a life of its own, and its members motivated me through the most difficult periods of writing. All of these sources provided momentum for completing the project, and for that I am profoundly grateful.

I am the person I am becoming because there were many individuals who supported my development along the way. Dr. Brian A. Bremen at UT Austin taught me how to read. Critically, incisively, copiously. Dr. Zena Moore recommended that I pursue doctoral studies, and did so with such zeal for her own scholarly interests that she convinced me. Dr. Scott Austin (RIP) at Texas A&M University wrote the book on Parmenides. He was a philosopher, a musician, and a fundamentally kind soul. You believed in me Scott, and the world is a little colder for having lost you. The Abbott of Monastère Kanshoji, Jean-Pierre Taiun Faure, reminded me how to breathe when I had forgotten. His teachings illuminate my path to this day. Sam Walker, Gilbert Tuhabonye, and Alan Culpepper were my running coaches at various points, and helped me prove to myself that I can endure the unforgiving minute in all aspects of life. When I needed time to step away from the desk and reflect as part of the ethnographic process, spaces like the Marshall Farm Park were vital. I am indebted to the stewards of the national, state, and local parks systems I visited that provided respite.

My mom Alicia and my tía Luchi were the first feminists that I knew, and their abundant love is the foundation of my life. My partner Jennie has walked alongside me for every step in this journey, she is my co-author, I am hers, and we have many works still to complete. My dissertation doggie, Alma Bear the Chocolate Labrador, took me on walks and played with me and kept me company when I was at the writing desk, she is my best buddy. And finally, a shoutout to my laptop, fall 2008 MacBook Pro, over a decade together and still going strong!

ABSTRACT**FROM 'DISENGAGED' TO DIGITAL: LATINO BOYS AS EMERGENT
TECHNOLOGY EXPERTS**

Carlos Ricardo Martínez

Kathleen D. Hall

Anthropological research suggests that young Latino men face a complex set of cultural norms that can make it difficult to identify as experts in technology. In education research Latino boys have historically been framed in relation to deficit-perspectives. This dissertation provides an account of Latino boys as self-efficacious learners. I ask, a) how did a group of Latino boys integrate their cultural values and extant technology-related learning practices into self-directed digital literacy learning?; b) What pertinent social processes shaped their emerging sense of themselves as members of a group of digital literacy learners?; and, c) How did these emergent technology experts formulate narratives about their educational trajectories and imagined futures based on their technical and social practice skills development?

Over eighteen months, eight Mexican-origin middle school boys met in a community center technology room. Utilizing a critical ethnographic approach, I observed the boys self-directed digital literacy practices, including coding, 3-D drafting, and graphic design. I collected 55 hours of audio recordings, semi-structured interviews, and participant products, as well as producing field notes and analytic memos to reflexively evaluate emergent concepts.

The ethnographic accounts suggest a mode of social identity formation wherein the boys applied their cultural values and learning practices to self-directed endeavors. A pattern

emerged in which the boys acknowledged the specialized skills of each other, and in turn, had their own forms of digital literacy expertise recognized. I contend the participants came to understand themselves and fellow group members as emergent digital literacy experts, developed communicative repertoires aligned with technologically proficient social identities.

This research contributes to scholarship in cultural anthropology, education/learning sciences, and Latinx studies. This research pushes the boundaries of critical ethnography by positioning the researcher as an activist-scholar. It focuses on how learners from non-dominant groups can develop identity trajectories in relation to their informal STE(A)M learning practices. And, it interrogates how a Xicanx researcher can participate with Latinx youth as a coordinator of dialogue, a navigator of educational spaces, and a colonizer valuing neoliberal ends/trajectories.

TABLE OF CONTENTS

ACKNOWLEDGMENT	IV
ABSTRACT	VII
CHAPTER 1: INTRODUCTION.....	1
CHAPTER 2: LITERATURE REVIEW.....	12
Critical Ethnography	13
Critical Pedagogy	16
The Im/migrant Experience	18
Borderlands.....	23
The New Latino Diaspora.....	24
Family Cultural Resources.....	26
Educational Experiences	33
Explaining Academic Performance.....	34
Social Identity Development and Methodological Approaches.....	38
CHAPTER 3: ETHNOGRAPHIC APPROACH.....	43
Researcher.....	46
Becoming – from ESL Teacher to Anthropologist.....	47
Preliminary Studies	48
The Study	51
Setting(s): Marshall – The End of the Line.....	52
Research Site.....	59
The School.....	60
The Cafeteria	62

	x
Ice Cream Meetings.....	64
Parent Involvement	66
Pizza Party	67
Participant Selection	69
Ethnographic Portraits.....	70
Alex's Story.....	70
Pablo's Story.....	72
Francisco's Story	74
Dante's Story	75
Leo's Story.....	78
Mateo's Story	78
Luis' Story.....	79
Jose's Story.....	80
Curricular Approach.....	81
Data Collection Methods	84
Data Analysis and Interpretation	87

CHAPTER 4: CRITICAL APPROACHES TO IMAGINED FUTURE AND NAVIGATING EDUCATIONAL TRAJECTORIES..... 90

Critical Theory and Critical Pedagogy.....	94
Critical Theory	95
Critical Pedagogy	96
Ethnographer as Coordinator	101
Critical Media Literacy.....	103
Curricular Approach	104
Description of Critical Media Literacy Sessions	105
Analysis.....	110
Imagined Futures.....	112
Un/Imagined Futures	114
Emerging Imagined Futures – The Military and College	116
Navigating Educational Trajectories	118
Secondary Trajectories	120
Higher Education Trajectories.....	124
Conclusion.....	129

CHAPTER 5: A DIGITAL LITERACY COMMUNITY OF PRACTICE.....131

Communities of Practice and Legitimate Peripheral Participation	135
Extant Digital Literacy Practices.....	140
Devices.....	140
E-sports.....	142
Role Playing Games	144
Learning New Digital Literacy Practices Together	145
Email and Google Apps	147
Coding.....	149
Art and Graphic Design.....	153
Drafting.....	155
Emergent Technology Expertise.....	156
Coding Expertise.....	159
Digital Art Expertise.....	161
Drafting Expertise.....	163
Extension Expertise Practices.....	164
An Analysis of Digital Literacy Learning as Social Practice.....	166
Learning from and with Participants	167
Connected Learning Across Spaces	173
Conclusion.....	174

CHAPTER 6: IDENTITY DEVELOPMENT THROUGH LEARNING AND SOCIALIZING IN A COMMUNITY OF PRACTICE176

Models of Identity and Identities in Practice	179
Models of Identity	181
Identities in Practice	184
Cultural Values and Manual Labor Practices.....	187
Una Buena Educación/ Bien Educado.....	188
Manual Labor Practices.....	190
Negotiations of Language, Race, and Masculinity.....	194
Language Use and Ideologies.....	195
Linguistic Connections to Race.....	199
Masculinity.....	202
Processes of Social Practice in Learning	208
Familiarity	209
Collaboration.....	212
Competition	214
Enthusiasm.....	216
The Value of Social Practice	217

	xii
Conclusion	221
CHAPTER 7: ETHNOGRAPHIC CODA	225
CHAPTER 8: DISCUSSION	233
APPENDIX	241
BIBLIOGRAPHY	245

CHAPTER 1: Introduction

“On Monday afternoon, President Obama became the first president to write a line of code,” The White House reported on December 10, 2014¹. But a group of Mexican-origin middle school boys had beaten him by eighteen months. In the early 2010s, computer science initiatives like Code.org’s Hour of Code had swept through news headlines, insisting on the importance of learning computer programming languages. Organizations like Girls Who Code (founded in 2012) and All Star Code, a program for Black and Latino high school boys (founded in 2013), promoted the importance of this skill set among non-dominant groups. Many considered it a great equalizer for the socioeconomically marginalized. For the eight boys who first explored coding together in a community center in Marshall, Pennsylvania in the summer of 2013, they enjoyed the challenge of mastering a new form of digital literacy. They did not view themselves as young pioneers, though they were. Theirs is an account of coming to a fuller understanding of themselves through digital literacy learning, and how their experience broadens our own understanding of Latino boys and education.

When examining the many stories that have been written about young Latino² men and their pursuit of education in the United States two patterns appear. The first is well documented, that Latinx communities across the U.S. are growing in both size and number (Flores, 2017) while data suggest that Latino males continue to fall behind their peers in completion of secondary and higher education (Snyder & Dillow, 2010). The second pattern occurs in education research, where Latino boys are predominantly framed as systemically disenfranchised or, to a lesser extent, academically high achieving. Historically, explanations of the academic

¹ <https://obamawhitehouse.archives.gov/blog/2014/12/10/president-obama-first-president-write-line-code>

² Here I use the gendered form of ‘Latino’ to indicate individuals that self-identify as male. In other instances of referencing communities or groups that include men, women and gender-neutral individuals, I use the term ‘Latinx’.

performance of Latino boys have reinforced—quite problematically, I will argue--culture of poverty (Lewis, 1959) and deficit (Solórzano & Yosso, 2001) perspectives. Interpretations of Latino students’ experiences in K-12 and higher education settings frequently use terms like disengaged (Ream & Rumberger, 2008), in-crisis (Lerner, 1994), and at-risk (Finn & Rock, 1997). More recently, research has emerged that: challenges achievement-gap formulations of academic success as racist (Kendi, 2016); parses how young Latino men are siphoned off the educational pipeline (Sáenz & Ponjuan, 2009; Rios, 2011); and, reframes young Black and Latino men as asset-laden learners (Carrillo, 2010; Harper & Williams, 2014).

Problematically, even when young Latino men have been framed as asset-laden within the context of schooling, it is only institutional measures like grades and standardized test scores that define an “asset” (Rong & Preissle, 1998) related to learning. When I visited Central Marshall Middle School, I observed how the boys were provided with rigidly structured learning opportunities, wherein most every minute of their day was accounted for, and the process of learning orchestrated for them in terms of pre-determined learning objectives, standardized testing assessment tools, and punitive behavioral management approaches³. Additionally, schools consumed by the requirement to make adequate yearly progress according to state standards often neglect more holistic and critically-minded approaches to teaching and learning as a form of human development. I contend that this overly structured approach to teaching discourages self-directed exploratory learning for youth at all socio-economic levels, but especially for youth growing up in low socio-economic status neighborhoods like some in Marshall where out-of-school enrichment learning opportunities are often scarce.

When extracurricular learning activities are not generally available through schools, then

³ The spring semester prior to beginning the dissertation project, I visited Central Marshall Middle School weekly, observing teachers, students and administrators in office, classroom, and cafeteria settings.

the forms of learning that occur in the home become important focal points for anthropologists and educational researchers. Home environments allow for the opportunity to organically learn values and skills as described in funds of knowledge (González, Moll, and Amanti, 2005) and community cultural wealth (Yosso, 2005) literatures. The ethnographic accounts I provide detail how the boys reported engaging in science, technology, engineering, arts, and math (STEAM) learning practices at home. Specifically, they received direct instruction in science, engineering, and math when learning manual labor practices with male family members. However, parents often have educational aspirations for their children, as do the children themselves, which exist outside of the areas of expertise of the parents and family members. As such, they may directly lack the dominant forms of capital within the home and family networks required to access the resources necessary to realize these aspirations.

In between the school and home contexts are what Kris Gutiérrez and colleagues describe as third spaces (Gutiérrez, Rymes, & Larson, 1995; Gutiérrez, Baquedano-López, & Turner, 1997; Gutiérrez, 2008), “particular discursive spaces... in which alternative and competing discourses and positionings transform conflict and difference into rich zones of collaboration and learning” (Gutiérrez, Baquedano-López, & Tejeda, 1999, p. 286). My work in this project is founded upon the presupposition that third spaces are necessary to provide proactive learning programs when schools do not. Additionally, I document how the boys’ access to technology in the home was limited, making third spaces like a community center a vital resource.

With a growing Latinx population, what about the educational experiences of the majority of Latino boys who fall between the scholastically high-achieving and at-risk categorizations? If we understand one of the problems to be that Latino boys are not completing secondary and higher education at the same rates as their peers, can a STEAM-related intervention in a third-space setting orient their identities to view themselves as emergent

technology experts and to re-imagine possible educational trajectories? And, how can a third-space learning environment be utilized to cultivate the boys' extant technological practices in ways not accessible in their home and school settings? These were the general questions I set out to answer at the beginning of this ethnographic study.

To address these questions, I begin with the following arguments. I argue that a critical ethnographer can function as a coordinator of learning in a third space setting, providing opportunities for the boys to explore their imagined futures and educational trajectories. The boys have extant digital literacy practices not recognized as learning assets by standardized institutional measures, which can be cultivated in a community of practice context. And that cultural values and learning practices acquired in the home contribute to they boys' emerging understanding of themselves as they develop as emerging digital literacy experts.

Thus, the story that I would like to relate about young Latino men and their pursuit of education in the United States began in Marshall, a small Southeastern Pennsylvania town well past its industrial prime. A research team headed by Stanton Wortham had initiated a series of projects there with a sizeable but non-dominant Mexican-origin New Latino Diaspora (Murillo & Villenas, 1997) community starting around 2005. I joined his team in 2008 and was involved in a few different projects. I met Spanish-speaking and bilingual parents at Saturday morning meetings convened to learn about and communicate their needs to the school district administration. I took part in afterschool homework help sessions designed to have teachers show parents how to optimally help their children with their homework. We filmed a teacher training video to document the educational aspirations the parents had for their children. I even spent an illustriously abbreviated career as a midfielder for the Delfines, a team in the Marshall men's Mexican soccer league, where I was able to meet community members and discuss their educational experiences in a more informal context.

Being a part of Professor Wortham's research team provided me with insight into the aspirations of Marshall's Mexican-origin parents⁴, young adult men⁵, and the school-community relations⁶. In 2011, my partner and I moved to Marshall in order to develop relations with local people and gain a better sense of the daily life in the town of 30,000. We lived two blocks away from Central Marshall Middle School, and I began meeting the administrators and counselors there as I prepared my dissertation proposal. At the same time, I had been introduced to Oscar, a local community member who had been a professional journalist in Mexico and recently opened a community center that served the local Spanish-speaking population with arts and cultural programming. As part of a grant, Oscar had acquired eight new state-of-the-art iMac computers and with them had fashioned a technology room as an instructional space.

Over the next several months, I met Latino sixth, seventh, and eighth graders at Central Marshall Middle School while volunteering as a cafeteria lunch monitor. The boys frequently talked about gaming and I realized they had formed loosely bound communities of practice. This piqued my interest and when I asked, they shared some of their other tech-oriented practices, like mobile device use, and e-sports viewing. A few also shared their aspiration to learn how to 'hack', or become computer hackers. The connection between their practices and interests and the availability of the tech room Oscar had assembled set the scene for our work together.

My intention in presenting this work is to document an intervention that began with the technology-related learning interests the boys already enjoyed and practiced. This intervention utilized the community center tech room as a third space to connect those interests to material and

⁴ They had high hopes for their children, and had made many sacrifices to provide the opportunity for them to be educated in Marshall, but were frequently overwhelmed with work responsibilities or didn't know how to begin to advocate for their children in the context of the school.

⁵ Many of the participants in the soccer league were ages 18-24, but expressed little interest in pursuing higher education. My impression was that most had decided their formal educational trajectories had run their course and they were committed to earning money immediately.

⁶ The district administrators were often well intentioned, though some suffered from what Villenas (2001) terms 'benevolent racism' – casting the Hispanic community as welcome but deficient.

instructional resources not readily available in the home or school. One purpose of this intervention was to reframe the conversation about Latino boys and education. To be considered asset-laden is broader than having high standardized test scores or grades. They should not be pathologized and labeled as in-crisis or at-risk in order to participate in extracurricular intervention. They are natural and capable learners, and possess the agency to develop their learning interests into forms of expertise and thereby develop their views of themselves and what they are able to accomplish.

This project is in conversation with literature in education, anthropology, and sociolinguistics. I first conceived of this work as based on Freire's (1973) critical pedagogy approach to education and specifically the incorporation of dialogue circles. I envisioned occupying the roles of ethnographer (researcher) and dialogue coordinator. One of the challenges was deciding how to design an intervention that allowed for guided dialogue and engaged boys in self-directed digital literacy practices. To accomplish both, I concluded, would require a critical ethnographic project, which Villenas and Foley describe as,

Doing prolonged, systematic fieldwork rooted in at least a year or two of participant observation, key informant work, and extensive interviews . . . [Critical ethnographers] utilize many traditional methodological practices, but unlike traditional ethnographers, do not usually aspire to produce holistic, universalizing portraits of whole cultures. Critical ethnographers tend to be more interested in producing focused, well-theorized accounts of a particular institution or subgroup that reveal oppressive relations of power (2011, p. 176).

Because the boys' learning in the context of the project was centered on technology, I decided that a multimodal form of *praxis*, or what Freire describes as the dual practice of reflection and action, would be a viable first step. What I designed was a critical media literacy program, which I describe in Chapter 4. In this chapter I also address the following questions: In practice facilitated by a critical Xicanx ethnographer, how do boys as emergent technology experts formulate narratives about educational trajectories and imagined futures relative to their

technical and social practice skills development, and their current lived experience? And, by relating praxis to the boys' learning and educational trajectories, how does a critical Xicanx ethnographer function as what Freire describes as a coordinator?

One of the first activities the boys and I shared together was to watch *The Hunger Games*. We discussed the oppressive relations of power depicted, and then the boys compared these to experiences in their own daily lives. This exercise provided an orienting foundation for the boys' self-directed engagement with digital literacy practices that would follow. Within the critical pedagogy framework of praxis, digital literacy learning served as the action the boys took, and our ongoing conversations enabled them to reflect on how their emergent expertise might transform their imagined futures and educational trajectories.

My role as critical ethnographer and coordinator evolved over the course of the project. In my attempt to provide a well-theorized account of our work together I too was required to continuously reflect on how I functioned in the tech room. At equal turns I was a mentor when the boys solicited my advice, a model in the way I offered examples of "think aloud" tech-related problem solving, and a co-learner (Rheingold, 2014) when the boys and I sat together working through the same computer programs.

In chapter 5, I incorporate the analytic lens of situated learning to provide a focused way of understanding *how* the boys were learning together and developing expertise within what Lave and Wenger (1991) refer to as a community of practice, a concept that stresses how learning is inextricably linked to social practice. In this chapter I explore how in a third space setting Latino middle school boys learn digital literacy skills while collaborating as a community of practice. How do the boys' extant digital literacy practices contribute to their ability to participate in a community of practice and to collaboratively develop new digital literacy skills? And, in what

ways do the positionalities of the researcher and the participants contribute to how learners take up new practices as domains of emergent expertise?

The boys began with experience around gaming, e-sports, and mobile device use, and interdependently developed new learning practices like coding, graphic design, and 3-D drafting on the tech room iMacs. Then, in an extension of their emergent expertise, the work on connected learning by Ito et al. (2013) strongly shaped how I understood the boys' valuation, acquisition, and circulation of forms of digital literacy in between school, home, and our regular meetings.

This dissertation project supports a sociocultural literacy learning perspective, and builds upon it by bringing the digital literacy practices of young Latino boys into the conversation with research on informal learning communities. It also contributes to the disruption of hierarchical master-apprentice narratives common in communities of practice literature. Further, in the course of disrupting this hierarchical model, this project challenges the primacy of school-based practices cultivating "asset-laden" learners and redirects the focus to self-directed practices in a third space. This approach allows for a broadening of how young Latino men have been framed in education and anthropological research. I document how this group of Latino boys arrived with sets, or repertoires, of digitally-mediated learning practices, how they expanded upon those practices independently and collaboratively, and how they discussed imagined futures related to the mastery, or emergent expertise, of these skills.

This sociocultural and interactive approach to learning has been identified particularly in the field of literacy as a way to enhance the learning process as well as what is learned:

From a sociocultural perspective, children develop, acquire, and are socialized to various literacies as they actively participate in culturally defined systems of practices such as participating in religious education classes, playing sports or games, and participating in formal and non-formal schooling activities (Cole, 1996; Goodwin, 1990; Heath 1991; Turner, 1997). In these contexts, interaction and language are the vehicles for bringing together what novices and experts or

“newcomers” and “old-timers” know. Here we mean that both teacher and students can be both experts and novices at different points in time and across many situations (Gutiérrez & Stone, 1997; Lave & Wenger, 1991; Rogoff, 1990). In the context of literacy learning, students acquire knowledge as they assume increasingly complex roles in activities with others” (Gutiérrez, Baquedano-López, & Turner, 1997, p. 369).

Another aspect of the intervention incorporated the work of Valenzuela (1999) on how schools subtract languages and cultural knowledge. In the tech room learning space the cultural values and home social practices of the boys were not ignored or “subtracted”. In fact, part of socializing within our community of practice included discussing learning that took place in their homes and would be considered forms of funds of knowledge (González, Moll, and Amanti, 2005) and community cultural wealth (Yosso, 2005). Together we acknowledged these as valid and valued forms of learning. In the Chapter 6, I offer a sociolinguistic interpretation of how these values and practices are incorporated into the boys’ models of identity (Wortham, 1996) and identities in practice (Wenger, 1998) and how they are connected to the boys’ technology-related social learning. It is in this chapter that I address the following questions: How do these young Latino males draw from previously acquired cultural values and learning practices as they engage in learning within the digital literacy community of practice? How do they negotiate their identities relative to discourses of language, race, and masculinity? And, what pertinent social processes shape their emerging sense of themselves as digital literacy experts and members of a group of learners?

The boys who chose to participate in the dissertation project were unique. As middle schoolers, they were in the process of transitioning across the liminal space between childhood and young adulthood. They were attempting to make sense of their place in their school, their town, and in broader terms, in U.S. society. They are also unique because over the course of a calendar year they chose to attend weekly sessions (twice-weekly in the summer) in the community center tech room practicing self-directed digital literacy together. Most of the sessions

were loosely structured and the boys largely determined the learning objectives. They were afforded time and material resources to explore platforms and applications such as CodeAcademy.com, Scratch, Adobe Illustrator, SketchUp, and iMovie. They encouraged, competed and collaborated with each other. At times their interest shifted from one program to another. And they also reached advanced levels of programming making problem-solving in our group difficult, and sometimes, unresolved.

Over the course of the project the boys began to move through that liminal space, transforming themselves, while, to paraphrase the writer Ben Lerner (2014), “the world rearranged itself around them”. Outside of the confines of our tech room sessions debates about the impact of immigrant Latinx communities on the future of the United States abounded (and continue). The boys both experienced instances of marginalization and understood that greater forces were acting upon them and their families. As a self-identifying Chicano male, I wasn’t immune to the local Marshall racial microaggressions, though with light skin and a college degree I suffered them to a lesser extent than some of the boys and their families.

In the reflection that I offer in the ethnographic coda, I reveal how in my stance as a critical ethnographer I came to realize how deeply I had internalized and hence was unconsciously passing on the educational narrative from which I sought to free the boys. I was assuming that the boys needed a way out, and that education would provide a path. In reflexively examining my role as a coordinator I realized that the message I was communicating to the boys was that their self-directed digital literacy practices were a vehicle for social mobility. Though I had first considered my pedagogical stance emancipatory, I later understood it as individualistic and counter to the collectivist cultural values and home practices of the boys. This final revelation is significant, because it was an important lesson for me, and one that other critical educational ethnographers working with non-dominant groups may want to consider. The emancipatory

vision that informs the researcher's intent may not have the same meaning for project participants. While I touted the high salaries available to individuals in the tech sector, it became increasingly clear that the boys' overriding concern was not personal advancement and success but supporting their families and communities. In the conclusion I outline how I plan to move forward with this research.

I turn now to an overview of the literature that provides a foundation for this project. I then describe the methodology or ethnographic approach that I used in this project. In the chapters that follow, I provide three distinct ethnographic accounts that address the role of the researcher as a coordinator of out-of-school learning, the extant and emergent forms of digital literacy the boys developed as a community of practice, and their identity formation as competent and enthusiastic technology experts. I conclude with an ethnographic coda and a discussion of the significance of the project. It is my hope that as you read the following pages, you keep in mind all of the eager and self-efficacious young learners who are at this moment each entering their own liminal space.

CHAPTER 2: Literature Review

In this chapter, I provide a review of the literature relevant to the project. I begin by introducing in more depth my critical ethnographic/pedagogic analytic approach, which is informed by theory from the subfield of educational anthropology. I then consider factors related to im/migration that shaped the community in which the boys live. I end with a discussion of the specific literature I draw from in analyzing the cultural and learning practices investigated.

The literature review lays a foundation for the overarching arguments developed in the dissertation: that educational interventions for non-dominant youth in an alternative learning environment require reflexivity on the part of the researcher; that the middle-school Latino boys in Marshall with whom I worked valued learning practices and were engaged in forms of technological expertise that supported their trajectories as knowledgeable students; and that cultural values and learning practices acquired in the home contribute to the boys' emerging understanding of themselves as they develop as emerging digital literacy experts. In presenting this argument, I concentrate on events that shape the "lived-experience" (Husserl, 1970, pg. 240) of these Latino boys and how they conceive of their educational futures.

I begin by considering the concepts of critical ethnography and critical pedagogy. The purpose of beginning with these concepts is to frame how I approach the particular social issue I am investigating. Critical ethnography is a qualitative research methodology in which the researcher acknowledges systemic inequality and seeks to observe and describe such inequality for the purposes of empowering dominated groups (Carspecken, 2001). Critical pedagogy is an educational theory that views the goal of education is *conscientization*, or to become aware of one's transformative power in the world and then find ways to enact that power (Freire, 1970).

The second body of work I will consider is related to issues of immigration and

transnational mobilities more generally, particularly in relation to globalization. Forms of trans-nationalism enabled by globalization will be discussed, along with their impact on the daily lives of young Latino males in a Diaspora. Studies of more recent im/migration patterns in the U.S. reveal how they are different from previous historical “waves” of im/migration. This work is relevant to my study, as the Mexican immigrants who have settled in Marshall are part of what is referred to as the New Latino Diaspora (Wortham, Murillo, & Hamann 2002).

A central aim of the project has been to challenge many of the problematic ways Latino academic performance has been framed in educational research. The review continues, then, with an analysis of deficit-framings of minority groups as well as how researchers have focused on family cultural resources to challenge deficit as well as cultural of poverty assumptions. Work highlighting funds of knowledge and social capital has served to problematize how values of the dominant group in society are often privileged over others. In particular, the community cultural wealth formulation, a derivative of critical race theory, delineates six forms of capital that can be deployed against deficit perspectives. I conclude this discussion by considering how research focusing on ‘counternarratives’, and particularly a *mujerista* approach to legitimating through storytelling, provides additional alternatives to deficit frameworks.

Finally, I consider linguistic anthropological approaches to social identity development that I draw from in my analysis, particular work focusing on gender and identity.

Critical Ethnography

Trueba (1999) defines critical ethnography as a methodology possessing the following qualities:

Advocating for the oppressed by (1) documenting the nature of oppression, (2) documenting the process of empowerment – a journey away from oppression, (3) accelerating the conscientization of the oppressed and the oppressors – without this reflective awareness of the rights and obligations of humans there is no way

to conceptualize empowerment, equity, and a struggle of liberation, (4) sensitizing the research community to the implications of research for the quality of life – clearly linking intellectual work to real-life conditions, and (5) reaching a higher level of understanding of the historical, political, sociological, and economic factors supporting the abuse of power and oppression, of neglect and disregard for human rights, and of the mechanisms to learn and internalize rights and obligations (p. 128).

Critical ethnography, then, involves some of the approaches familiar to traditional ethnography, namely documentation and participant-observation. However, it also involves an activist value orientation. As mentioned in the introduction to this dissertation, Villenas and Foley (2011) further corroborate this definition, stating that,

Critical ethnographers tend to be more interested in producing focused, well-theorized accounts of a particular institution or subgroup that reveal oppressive relations of power. To use critical theorist Jurgen Habermas' (1972) apt phrase, knowledge production has to have an "emancipatory intent" (p. 176).

It should be noted here that there is a fine –emic/-etic distinction between the ethnographer's intention and the value system of the participant group. That is to say, "emancipatory intent" should not be conflated with 'paternalistic habit'. This requires that the researcher make every effort to remain keenly aware one's positionality and power in order to avoid a prescriptive stance.

According to Anderson (1989), critical ethnography has developed in reaction to several tendencies in educational research deemed to be highly problematic. As he explains,

Critical ethnography in the field of education is the result of the following dialectic: On one hand, critical ethnography has grown out of the dissatisfaction with social accounts of "structures" like class, patriarchy, and racism in which real actors never appear. On the other hand it has grown out of dissatisfaction with cultural accounts of human actors in which broad structural constraints like class, patriarchy, and racism never appear (p. 249).

Carspecken (2001) places the advent of critical ethnography in education at some point in the 1980s, first appearing in McLaren's *Life in Schools* (1989). Retroactively, it was applied to ethnographies of education that unpacked social hierarchies and forms of disenfranchisement,

such as Willis' *Learning to Labor* (1977). As a methodology it is, "informed by critical theories of education, such as critical pedagogy theory, feminist theories of education, and neo-Marxist theories of education" (2001, p. 3).

It is worth considering the trajectory of critical ethnography and how the 'postcritical' response to it can enrich the conceptual framing of research. Noblit, Flores, & Murillo (2004) offer an approach to "postcritical ethnography", which they formulate not as a subsequent stage in the evolution of ethnography, but rather a problematization of current critical ethnographic trends. This work aligns with the critical ethnography I endeavored to practice. It is important in particular because the authors warn the ethnographer to be aware that there are stories one "inscribes" and stories one knowingly or unknowingly omits. They conclude that "critical ethnographers must explicitly consider how their own acts of studying and representing people and situations are acts of domination even as critical ethnographers reveal the same in what they study" (Noblit, Flores, & Murillo, 2004, p. 5).

More recently, Madison (2012) writes of the ethical responsibility of critical ethnographers to "address processes of unfairness or injustice within a particular lived domain" (p. 5). This dissertation addresses the unfairness of the lack of access to resources (both temporal and material) in the context of the boys' self-directed digital literacy and also how a majority of Latino boys are framed in educational literature. The aim is for the boys to "envision alternative life possibilities" (Madison, p. 6) in the form of imagined futures and educational trajectories. Madison also echoes Noblit et al. (2004) when she reflects on the positionality of the critical ethnographer, "it is vital because it forces us to acknowledge our own power, privilege, and biases" (p. 8). Finally, Madison provides a methodological bridge to critical pedagogy through her discussion of the role of dialogue in critical ethnography. The researcher's reflexivity paired

with a continuous engagement with community members allows, “Dialogue [to]... move from ethnographic *present* to ethnographic *presence* by opening the passage ways for readers and audiences to experience and grasp the partial presence of a temporal conversation constituted by others’ voices, bodies, histories, and yearnings” (p. 11). And this was certainly the case in our conversations in the tech room.

Critical Pedagogy

Carspecken’s acknowledgment of critical ethnography’s connections to critical pedagogy theory and neo-Marxist theories of education provides a segue for a discussion of critical pedagogy. Beginning with Paulo Freire in the early 1960’s and his literacy work with Brazilian peasants, critical pedagogy was theorized as a remedy to the ‘culture of silence’ that Freire witnessed among the dispossessed. *Pedagogy of the Oppressed* (1970) describes this silence not as a lack of response to the economic, political and social subjugation in which they were mired; rather it was a response that lacked a critical, reflective quality. This critical, reflective quality is part of the dialogue that occurs when one engages with ‘naming’ the world; the first step required before changing the world. For Freire, this naming of the world is a right that all humans have, not only those in power. And critical reflection serves as a counterpoint to action, both being necessary for praxis, giving voice to the oppressed and allowing for social transformation (1970, p. 75). Critical pedagogy draws upon Marxist theory in order to highlight the importance of dialogue in instantiating this type of reflection as a means of clarifying one’s transformative power in the world. “The materialist doctrine that men are products of circumstances and upbringing, and that, therefore, changed men are products of other circumstances and changed upbringing, forgets that it is men that change circumstances and that the educator himself needs educating” (Marx & Engels, 1968, p. 28).

Trueba’s earlier invocation of Freire with “accelerating the conscientization”, reaffirms

the conceptual similarities between critical ethnography and critical pedagogy. Freire's *Education for Critical Consciousness* (1973) introduces the concept of *conscientização*, or conscientization, as the process of learning to perceive social, political and economic contradictions involving oppression (p. 19). Once aware of these contradictions, one can begin praxis, the cohesion of reflective action and critical theorizing. When engaged in praxis, one problematizes the perceived contradictions. Problematization is defined as, "a codifying of total reality into symbols to generate critical consciousness to alter relations with nature and social forces" (p. 4). Praxis is the heart of critical pedagogy methodology.

Through praxis (problematization) the community member moves from object to subject. Simply stated, participants begin to understand that they don't work *in* the world but *with* the world. An awareness of one's transformative power in the world begins with the, "goal of the continuing humanization of man" (Freire, 1970, p. 77). It is worth restating here, the theoretical overlap between critical pedagogy and critical ethnography. Trueba (1999) describes the goal of critical ethnography as, "(the) intimate relationship between the intellectual activity of research and the *praxis* of daily life of researchers... its *raison d'être* is to transform society via conscientization and social change" (p. 128-129). Conscientization is a process that always draws from the inherent knowledge and experiences of the local community members. Freire explicitly warns against a "banking model of education" in which information is to be deposited from outside the community or individual.

Critical pedagogy practices via critical ethnographic methods within the domain of educational research remain robust. To mention two examples here, Duncan-Andrade & Morrell (2008) provide a broad portrait of the ways in which critical pedagogy can be implemented within the framework of institutions. Urrieta (2010), on the other hand, examines how critical pedagogy

can serve as an influence in transforming Mexican-American teachers into Chicana/o activist educators. Each provide insight into how Latino students, in the case of this study, middle-school Latino boys, can come to an understanding of subtractive assimilationist and cultural deficit perspectives in mainstream/whitestream schools.

Inherent to both critical ethnography and critical pedagogy is a commitment to addressing social injustice and contributing to positive forms of social change. They share an activist approach to engaging in work with non-dominant communities. Critical ethnography, as a research methodology, uses traditional ethnographic approaches while acknowledging existing structural inequalities in society that maintain hierarchical relationships. The goal of critical ethnography as a methodology is to use practices like documentation, interviewing, and participant-observation to illuminate these inequalities as a first step toward achieving a more egalitarian society. Critical pedagogy shares critical ethnography's concern with social inequality and uses the process of *praxis* – simultaneous reflection and action on the part of the learner, to realize one's transformative power in the world. Work on critical pedagogy precedes critical ethnography and, as will be explored in further detail below, has been influential in the development of critical ethnographic practices.

The Im/migrant Experience

Four broad topics in the research on immigration apply most directly to the lived-experience of middle-school aged Latino boys in Marshall, PA. Perhaps the broadest of those topics is the focus on the im/migrant experience itself. It is relevant because the boys, whether born in the U.S. or not, are members of the Marshall Mexican migrant community. Understanding their positioning in present U.S. society requires an understanding of the history and reasons for migration, along with the complex ways in which contemporary migration trends drive, and are driven by, flows of capital and improvements in information technologies. For this reason, it is

useful to consider the im/migrant experience in the context of globalization and trans-nationalism. This section will, in its first half, address theories of globalization and trans-nationalism and their conceptual similarities and differences. The second half of this section will take a closer look at literature on im/migration as it applies to middle school aged Latino boys in Marshall.

The terms globalization and trans-nationalism are often used interchangeably. For the purposes of this review, it is helpful to understand how social science researchers define both terms. Suárez-Orozco, Suárez-Orozco, and Qin (2005) define globalization as, “processes of change simultaneously generating centrifugal (as the territory of the nation-state) and centripetal (as supranational nodes) forces that result in the deterritorialization of basic economic, social and cultural practices from their traditional moorings in the nation-state” (p. 6). Appadurai (1996), conceives of globalization as, “a deeply historical, uneven and even *localizing* (his italics) process, (that) does not necessarily or even frequently imply homogenization or Americanization... to the extent that different societies appropriate the materials of modernity differently...” (p. 17). Inda and Rosaldo (2002) offer a straightforward definition of globalization, “the intensification of global interconnectedness, suggesting a world full of movement and mixture, contact and linkages, and persistent cultural interaction and exchange” (p. 4). They then theorize its affect on the world, “It implies a fundamental reordering of time and space” (p. 8).

These three definitions of globalization can each be explored more closely. First, what are the articulations of the aforementioned centrifugal and centripetal forces? According to Suárez-Orozco et al. (2005), there are three main aspects of globalization: post-national economies, instantaneous information and communication technologies, and large-scale immigration (p. 3).

Also of concern are the ways in which information technologies make available and elicit consumer desire in places where the economic infrastructure cannot meet the demands of such consumerism. Children at a dial-up Internet café on the outskirts of Lima, Peru can watch hip-hop videos, but the clothes, cars, and comestibles displayed therein are often beyond their economic realm of possibility. Further, this exposure to, “new information, communication and media technologies at the heart of globalization tend to stimulate migration because they encourage new cultural expectations, tastes, consumption practices, and lifestyle choices” (p. 7).

From a historical standpoint Suárez-Orozco et al. assert that of the three aspects of globalization, international flows of capital and large-scale immigration are long-standing phenomena, each with their respective cycles and waves, but the new factor is the spread of information and communication technologies (p. 7). This assertion is reflected in Inda and Rosaldo’s (2002) conception of how features of globalization compress space and time.

Appadurai’s (1996) definition of globalization, as “a deeply historical, uneven and even *localizing* (his italics) process...” (p. 17), is more fluid than that of Suárez-Orozco et al. Where Suárez-Orozco et al. envision center-periphery models (as evidenced by his centrifugal/centripetal forces analogy), Appadurai offers a theory made up of “-scapes”, that is, *ethnoscapes*, *mediascapes*, *technoscapes*, *financescapes*, and *ideoscapes*, as layered distinctions that make up contemporary globalization. Appadurai understood this when he stated, “The new global cultural economy has to be seen as a complex, overlapping, disjunctive order that cannot any longer be understood in terms of existing center-periphery models (even those that might account for multiple centers and peripheries)” (p. 32).

Concisely, *ethnoscapes* refers to, “the landscapes of group identity”, which Appadurai (1996) warns, “are no longer tightly territorialized, spatially bounded, historically

unselfconscious, or culturally homogenous” (p. 48). *Technoscapes* index, “technology... both mechanical and informational (that) now moves at high speeds across various kinds of previously impervious boundaries... driven by... increasingly complex relationships among money flows, political possibilities and the availability of both un- and highly skilled labor” (p. 34).

Financescapes allude to, “the disposition of global capital... as currency markets, national stock exchanges, and commodity speculations move megamonies through national turnstiles...” (p. 35).

The interdependence of these first three –*scapes* is an inherent characteristic of globalization, according to Appadurai (1996), each either allowing or constraining sets of possibilities for the others. The fourth, *Mediascapes*, “refer both to the distribution of the electronic capabilities to produce and disseminate information (newspapers, magazines, television stations and film-production studios) ... and to the images of the world created by these media” (p. 35). The last, *Ideoscapes* are, “composed of elements of the Enlightenment worldview, which consists of a chain of ideas, terms, and images, including *freedom, welfare, rights, sovereignty, representation*, and the master term *democracy*” (p. 36).

Inda and Rosaldo (2008) in their work on globalization identify developments that have had a powerful impact on the lives of immigrants. They emphasize in particular how advances in technology, such as cell phone satellites, allow people to experience events simultaneously, even though they may physically be a great distance apart. With the proper cable connection and cell phone reception, a teenager in a Mexican Diaspora community in metropolitan Philadelphia can watch a live feed of an English Premier League soccer match taking place in Manchester, England, while talking on the phone with his cousin in Michoacán, Mexico – effectively contracting the space between the two people and the event they are “sharing”. From an

anthropological standpoint this is important because, if one aspect of forming a community is that of “shared experience”, then Appadurai’s (1996) contention that *ethnoscapes* (group identity) are no longer “tightly territorialized or spatially bounded” is validated by Inda & Rosaldo’s assertion that globalization compresses both space and time.

Work on transnationalism has also been central to anthropological research on im/migration. Basch, Glick Schiller, & Szanton Blanc (1994), for example, define transnationalism as, “the processes by which immigrants forge and sustain multi-stranded social relations that link together their societies of origin and settlement”. These “transmigrants, take actions, make decisions, and develop subjectivities and identities embedded in networks of relationships that connect them simultaneously in two or more nation-states” (p. 7). Individuals (in the context of networks) exhibit agency via, “behavior”, “imagination”, “actions”, and “decisions” not exclusive of the supranational structures of capital flows and information technologies globalization is concerned with, but rather in concert with them.

One (but clearly not the only) way of understanding the relationship between globalization and transnationalism derived from the work of the anthropologists I have discussed is that we can observe what globalization *is* and what transnationalism *does*. Or put another way, globalization exists as a phenomena we can observe as capital flows, large-scale migration, information technologies, or conceive of as layered –*scapes*, of ideologies, group identities, etc., along with the resultant compression of space and time, but transnationalism concerns itself more with how people work within the frames/–*scapes* that compose globalization. This is simplistic of course, because as people act upon the characteristics of the global and local environment, they inherently change them and are changed by them. But again, my overriding concern is how middle-school aged Latino boys come to understand their place in a world where globalization

manifests itself in several ways in their daily lives, and equally, how their learning and in turn, understanding of the world is influenced by their being transnational actors/agents.

Anthropologists have also long considered what motivates migrants to immigrate to the US and the challenges they face when they arrive and settle. This body of work is particularly relevant for understanding the experiences of Latino youth growing up in a Diaspora setting such as Marshall. A central concern in this work has been to identify and explain patterns of migration. (Trans)migration is one type of pattern, described by Basch, Glick Schiller, and Szanton Blanc (1994), in which migrants maintain semi-permanent existences in both the home country and the destination country. Some examples of participation include how immigrants might continue to engage in the political processes of the home country (Zavella, 2011), and remit funds for transnationally organized public works (Smith, 2005) while employed and physically living in the destination country. Social remittances (Levitt, 1998), another aspect of the transmigration pattern, are defined as, “the ideas, behaviors, identities, and social capital that flow from receiving- to sending- country communities” (p. 927). Transmigration is the most recent form of migration and is made possible by the improvements and speed of information and transportation technologies.

Borderlands

Work in the fields of post-colonial studies and Chicana Studies has focused not simply on movement across spaces but on borderlands and in-between spaces. As Bhabha (1994) has argued, “In-between spaces provide the terrain for elaborating strategies of selfhood – singular or communal – that initiate new signs of identity, and innovative sites of collaboration, and contestation, in the act of defining the idea of society itself” (p. 2). Gloria Anzaldúa (1987), a prominent Chicana Studies theorist, articulates a borderlands approach that transcends geography, and is just as applicable to a Latino Diaspora in Pennsylvania as it is her community on the U.S.-

Mexico border.

Both Bhabha and Anzaldúa bring attention in their work to the formation of hybrid identities. For though children may be born of two Mexican parents, being raised in the U.S. renders them neither entirely Mexican nor American. Moreover, “*la conciencia de la mestiza*”, or hybridity awareness, presents both opportunity and challenge. On the one hand, Anzaldúa acknowledges the difficulty of, “mental nepantlism, an Aztec word meaning torn between ways, *la mestiza* is a product of the transfer of the cultural and spiritual values of one group to another...” This requires that transmigrants develop unique skills, for, as she explains, “The new *mestiza* copes by developing a tolerance for contradictions, a tolerance for ambiguity” (1987, p. 100-101). This *mestizo* subjectivity is clearly, then, something the boys in Marshall acquire while growing up within Mexican families in a Diaspora community in the United States.

The New Latino Diaspora

According to Hamann, Wortham, and Murillo (2002), “The New Latino Diaspora represents a unique sociohistorical location”, (p. 2). Where previously, a few large U.S. urban areas served as the primary receiving points for Latinos (Los Angeles, Houston, New York, Chicago), currently New Latino Diaspora communities are being established directly in rural (Hamann, 2002) and suburban areas (Singer, Hardwick, & Brettell, 2008). As Suárez-Orozco et al. (2005) state, “The best predictor of who will migrate is who has already migrated. Transnational family reunification continues to be a critical vector in immigration today” (p. 10). These are important points because Latino communities will continue to grow in places where they previously hadn’t existed, requiring negotiations of identity among new arrivals and long-standing community members alike. This becomes especially interesting when taken in combination with Massey’s assertion regarding the costs and benefits of Spanish-language acquisition.

Another issue to consider for transmigrants in New Latino Diaspora settings is the potential for what Suárez-Orozco et al. term ‘utopias and dystopias’ based on social and cultural capital (2005). It is usually assumed that most Mexicans migrating to the U.S. do so in accordance with *segmented labor market theory*, or the idea that they start at the level of the lowest paying jobs (Piore, 1979). This model suggests that social class and documentation status on arrival do much to determine real and perceived opportunities. Of course, educational attainment and access to family cultural resources can augment those opportunities. Taking into account the notion of utopias, or achieving ‘The American Dream’, vs. dystopias, or lingering in economic and educational poverty in an unfamiliar place, the immigrant/transmigrant/mestiza experience is a precarious one.

In this literature review, various conceptualizations of globalization have been explored: Suárez-Orozco et al.’s centrifugal and centripetal forces that deterritorialize economic, social, and cultural practices from the nation-state; Appadurai’s five dimensions of global cultural flows; and Inda and Rosaldo’s interpretation of time-space compression. Transnationalism has been discussed as the social relations that occur between home and destination communities. And, an articulation of the specific context of immigration that I plan to research has been given as transmigration practices in a New Latino Diaspora setting.

For the purposes of this analysis, Appadurai’s layered *-scapes*, transmigrant positioning, and *mestiza/o* consciousness come to the fore. This is because in my more than four years of experience working with the Mexican community in Marshall, I have found that the center(s)/peripher(ies) model doesn’t map onto the life histories and experiences of the community members (especially the younger ones) as well as the *-scapes* model does. That the concept that *ideoscapes* can be communicated via *mediascapes* between *ethnoscapes*, is just one

example of the complexity that is prevalent in the only world middle school aged Latino youth in Marshall have known.

Further, transnational practices like the Feast of the Virgin of Guadalupe, celebrated syncretically with Catholic statuary, indigenous dancers, vehicles festooned with multi-colored lights and pulling trailers with live *Banda* music every December 12th at the Catholic church in Marshall exemplify cultural hybridity. This hybridity is the essence of *mestiza/o consciousness*. It is within this setting that Mexican community members and their U.S.-born children transfer cultural values, all the while exhibiting a tolerance for ambiguity regarding their social position in the town locally and the country nationally. In the next section the focus will shift to a discussion around family cultural resources as theory has been developed and methodologies practiced with Latina/o and minority groups.

Family Cultural Resources

It is important to acknowledge the primacy of the family setting when researching the daily lived-experiences and social interactions of middle school aged Latino boys. The cultural resources the family provides often have a direct impact on how these boys experience education. I will begin this section of the literature review by discussing how deficit-framing has historically been applied to immigrant/minority groups, and Mexican(-American)s in particular. I will then move on to discuss methodological responses to this framing. Included in this discussion is research focusing on funds of knowledge, social capital, community repertoires of practice, community cultural wealth, and counternarratives. I will specifically attend to how various researchers' interpretations complicate the use and application of these theories.

Historically, Latinos (along with other minority groups and low socio-economic status groups) in the U.S. have been portrayed as lacking interest in education and possessing a 'culture

of poverty.’ Deficit models have been utilized to explain below-average academic achievement (Valencia 1997a). Cultural poverty explanations attribute the lower levels of academic achievement among poor people generally to the influence of cultural patterns passed on from generation to generation. For example, as Marans and Lourie (1967) argue,

... Whites, Negroes, Puerto Ricans, Mexicans, and all others of the poverty group who basically share a common design for living... seem to perpetuate their own conditions in their children through their child-rearing patterns (and therefore) ... produce a disproportionate incidence of academic failures and of lower socioeconomic memberships among their full grown offspring (p. 20-21).

Or, as Sowell (1981) asserts in relation to Mexican Americans more specifically, “The goals and values of Mexican Americans have never centered on education” (p. 266). Studies like these reinforce views that parents, due to their cultural values, are not concerned about their children’s academic achievement.

While deficit thinking can be traced to the American Colonial period (Menchaca, 1997), Valencia & Black (2002) sum up the contemporary deficit view this way,

Given that Mexican Americans (allegedly) (their parentheses) do not hold education high in their value hierarchy, this leads to inadequate familial socialization for academic competence, which in turn contributes to the school failure of Mexican American children and youths (p. 83).

Deficit models assume that educational institution(s) provide everything necessary for academic success, and when this success eludes the student(s), culture(s) or family are to blame.

In contrast to the deficit paradigm, other theories are founded upon more positive views of Latino families and their involvement with their children’s education. Gonzalez, Moll, & Amanti (2005) in particular provide a powerful challenge to deficit models with their concept of funds of knowledge. Vélez-Ibáñez & Greenberg (2005), moreover, locate the historical formation of funds of knowledge along the U.S.-Mexico border. They associate it with the breadth of knowledge and skills acquired to maintain one’s livelihood. A few examples include, an understanding of soil science, hydrology, animal husbandry and weather systems (p. 52). While

there has been no formal or institutionalized manner of disseminating such knowledge, this information has been shared intergenerationally and between households. Vélez-Ibáñez & Greenberg (2005) define funds of knowledge as strategic and cultural resources that households possess (p. 47). Vélez-Ibáñez finds that households lacking in traditional fungible commodities as forms of capital are able to deploy information and experience as networks of *confianza*, or trust and develop and maintain credit associations and non-market systems of exchange in these communities (p. 3).

A funds of knowledge approach to educational research seeks to leverage the inherent knowledge and experiences of local community members into academic attainment. Gonzalez, Moll, and Amanti (2005) pick up this investigational thread as, “Teacher-ethnographers ventured into their students’ households and communities seeking to understand the ways in which people make sense of their everyday lives” (p. 6). González, Moll & Amanti (2005) implement the funds of knowledge framework in their study of Mexican-origin households through “ethnographic methods involv(ing) participant observation, interviews, life-history narratives, and reflection on field notes... (in order to) uncover the multidimensionality of student experience” (p. 6). This methodology runs counter to deficit perspectives because researchers seek to understand the cultural assets and practices that contribute to the child’s education, assets that already exist within the home. This shifts the focus to the home in contrast to other approaches to family involvement that emphasize involvement in “schooling” and schools.

Funds of Knowledge approach also break-with conventional assumptions about home-school visits in which teachers bring school knowledge to homes. Instead, the funds of knowledge approach encourages teachers to become ethnographers and seek to visit in order to learn from families. Here the focus is primarily on teachers learning about and from a family’s cultural

practices, rather than being prescriptive and requiring the family to align with their values and practices of the school culture. By observing the practices and enacted informational assets of the households, researchers can begin to reformulate notions of education locating it outside of traditional schooling as well. This counters deficit models of education in which low socio-economic status is equated with a ‘culture of poverty’ and the only perceived solution is to inject middle-class values into these communities. Instead, funds of knowledge approaches focus on family cultural wealth, which is sometimes relayed through *cuentos* (stories), *dichos* (proverbs), and *consejos* (advice) in addition to the direct imparting of household skills (Yosso, 2005).

It is incumbent on an activist-researcher utilizing a funds of knowledge approach to begin by observing and documenting the family and household cultural resources and their educational value, rather than imposing a set of cultural practices valued by a more privileged group. Working with a group of Latino middle-school boys who have expressed interest in pursuing higher education, I am especially wary of initiatives that foist the values and practices of the privileged upon others under the guise of “mentoring”. To do so only reaffirms a deficit perspective.

Lopez (2001) in his study of parental involvement in an im/migrant household seeks to understand parent values and the meaning they give to their children’s education. Over the course of sixteen unstructured observations and twelve semi-structured interviews with one family, Lopez discovers the parents “understood involvement as a means of instilling in their children the value of education through the medium of hard work.” They also view “taking their children to work as a form of involvement” (p. 416). As a family cultural resource, in other words, the Padillas transmit to their children the value of hard work. The father takes the children to work in agricultural fields as a form of “experiential learning” (p. 421). They can choose to

work hard in the fields or work hard in school, but it is the value of hard work that is an immutable fact. As Mr. Padilla explains, “If we don’t work, we don’t eat. There is no future if there is no work” (p. 420). The value of hard work, then, is transmitted as part of the family’s fund of knowledge. And, moreover, hard work is enacted as a value in school and allows the Padilla children to transcend their working-class environment. As Lopez reports,

José Alfonso... graduated second in his class and went on to the U.S. Naval Academy. Kathy... ranked ninth in her class and is in nursing school, Aimee graduated sixth in her class and is a biology major... and all are doing well in their postsecondary careers” (p. 420).

In this case, hard work functions as a valuable component of the family’s fund of knowledge because it allows for the maintenance of one’s livelihood, *and* it can enable the achievement of social mobility through formal education.

Gutiérrez and Rogoff (2003) community repertoires of practice concept also provides a direct challenge to deficit-models. Community repertoires of practice, they argue, draw upon the wealth and diversity of knowledge associated with an individual’s cultural-historical past. To avoid essentializing groupness with the use of static models of shared culture, they encourage attending to the variation that exists in a group’s or an individual’s history and cultural practices “because the variations reside not as traits of individuals or collections of individuals, but as proclivities of people with certain histories of engagement with specific cultural activities” (p. 19).

This cultural-historical approach makes an important analytical contribution in emphasizing a student’s “experience in activities” rather than their cultural “traits” (p. 19). Lopez (2001) can be seen as making this shift in his focus on “hard work” as a valued cultural practice for the Padillas. Gutiérrez and Rogoff’s formulation shifts attention away from “locating characteristics” within groups to “understanding processes”, or the practices in which group

members engage (p. 20). Drawing insight from their work, it becomes clear that categories such as ‘middle-school’, ‘Latino’, and ‘male’ are only helpful in analyzing the experiences of the Latino boys in this study in considering cultural practices the youth may (or may not) share. It leads, as Gutiérrez and Rogoff suggest, to a “focus on understanding *developing* individuals and *changing* communities” (p. 23) rather than assuming and assigning static memberships to individuals and attributing behavior to the influence of membership.

Yosso brings attention to an additional contribution of the notion of community cultural wealth by contrasting it with Bourdieu’s formulation of social capital. Traditional thought on social capital, he argues, implicitly characterizes white, middle-class culture as the norm. So while students of color and/or low-socioeconomic status can garner social capital through formal schooling, the values and practices of their own cultures do not carry the same worth among privileged groups (p. 76). In other words, Yosso contends that what Bourdieu defines as social capital lacks breadth when considering *all* the resources that can be marshaled for academic success. While a lengthy delineation of all six forms of capital under community cultural wealth is beyond the scope of this review, a brief discussion of family cultural resources as they pertain to middle-school aged Latino boys is merited.

Aspirational capital emphasizes the qualities of perseverance and resilience. This has, in psychological literature, been defined as self-efficacy (Bandura, 1977), or the ability to maintain focus on goals despite real or perceived obstacles. Just as self-efficacy can be modeled for a student, aspirational capital can be transmitted in a family or community setting. Linguistic capital, in the context of community cultural wealth, can include the learning of *cuentos* (stories), *dichos* (proverbs), and *consejos* (advice) (Yosso, 2005 p. 79). These forms of storytelling serve to enhance students’ communicative repertoires. Familial capital is most similar to funds of

knowledge in that it is a resource that can be formed in the household and places value on kinship (extended family) networks. This valuation can then be carried from the home and become metaphorically introduced in settings like sports, school, religious gatherings and other social community activities (Yosso, 2005 p. 79).

Community cultural wealth as a framework interprets social capital beyond what is valued by privileged groups to include social networks within communities of color that aid each other in a mutual fashion on a regular basis. Navigational capital is the resource that allows individuals to enact their agency despite structural inequalities. From a communal standpoint, individuals can share information to successfully proceed through job markets, schools, healthcare and judicial systems. Resistant capital is similar to Freire's (1970) concept of critical consciousness. As a resource, resistant capital is the understanding that oppression is systematic and challenging the status quo, rather than engaging in conformist practices, is the only way to enact positive social change. Within communities of color oppositional consciousness can be explicitly taught or implicitly modeled in family or community settings.

The utilization of resistant capital is evident in the final concept considered in this literature review, that of counternarratives used for the purpose of teaching a child to be *bien educado* (morally educated). Villenas (2001) describes an ethnographic study she conducted in which a deficit-framing model is applied (via social service professionals) to Latina mothers with whom she is working. She terms this deficit-framing, "benevolent racism" (p. 4). In response to this categorization, the Latina mothers deploy, "counterstories, through which they claimed dignity in their role as mothers/educators who imparted what they believed to be a "better" education of morals and values than what Hope City had to offer" (p. 4). It seems that the theoretical root of Villenas' counternarratives may grow out of a cultural feminist movement, or

consciencia de mujer (Anzaldúa, 1987, p. 77), as a form of resistance to not only the ways in which the white/Southern/middle-class positioned Latina mothers, but also to the patrimony present within Latino/a culture (and homes).

As a methodology, the telling and documenting of counternarratives has, “critical implications for continued family and community resilience... mothers are key to providing children with the cultural integrity to resist their deficit-framing as “minority” student in the English-speaking/non-bilingual schools of Hope City” (p. 22). Counternarratives provide a family cultural resource that empowers and gives voice to a marginalized population (*mujeres de hogar* / women of the house) within a marginalized population (Mexican labor force in the Southeastern U.S.), for the purpose of transmitting moral values and therefore expanding the concept of education beyond mere schooling.

Each of the frameworks for understanding family cultural resources introduced here was chosen for its value in refuting the deficit-framing of immigrant/minority groups, particularly Mexican(-American)s. And each has inspired or been utilized within the analysis presented in this dissertation.

Educational Experiences

As this review shifts in focus from literatures on critical ethnography, critical pedagogy, and family cultural resources to examine the research on the educational experiences of young Latino males, it is worth first considering how this designation may be problematic. The category of “young Latino males” is reductive in that it glosses over important differences in birthplace (nationality), documentation status, English language skills, family background (class) and phenotype. I draw from Gutiérrez & Rogoff (2003) in emphasizing the importance of attending in analyses to individuals’ unique cultural-historical experiences, rather than essentialize groups

based on race or ethnicity.

At the same time, the initial impetus for this research with Latino youth is based on evidence that the rate at which Latino males drop out school to join the workforce has risen (Solórzano, Villalpando, & Oseguera, 2005; Yosso & Solórzano, 2006), and that Latino males are not matriculating into four-year college programs at the same rate as Latinas (Castellanos, Gloria, & Kamimura, 2006). These two statistical trends are part of what Saenz and Ponjuan (2009) refer to as, “the vanishing Latino male in higher education”. These trends, considered along with demographic projections of a rapidly growing Latino population, forecast a future where a large part of American society will be under-educated and under-trained unless interventions are taken with urgency.

Of the eight boys that participated in the study three were born in Mexico, and five in the United States. Regardless of whether they are first- or second-generation, many of them were subject to similar environmental stressors, “including high levels of poverty, persistent experiences of ethnic and racial discrimination, segregation, community violence, and poor schools” (Suárez-Orozco, Suárez-Orozco, & Todorova, 2008, p. 4). It is with these factors in mind that we can begin to consider some of the waypoints of contemporary educational research on immigrant and minority students.

Explaining Academic Performance

This section begins with a discussion of the Willis’ (1977) study of class reproduction and resistance and Ogbu’s work on the differential levels of educational achievement between immigrant and voluntary minorities. I then consider what can be learned from Foley’s (2004) critique of this work. I conclude with a discussion of how Valenzuela’s (1999) analysis of subtractive schooling further both challenges and complicates the theoretical claims of prior

studies.

Willis, in *Learning to Labor* (1977), examines the processes by which, “working class kids get working class jobs”, and in doing so focuses on what he calls the *cultural level* of the students as a group. In his ethnography of twelve working-class male students in the U.K., he complicates the portrayal of educative and economic reproduction by noting the ways in which the boys enact oppositional stances toward school authority figures. By refusing to cooperate within the school’s framework of labor reproduction, the students ultimately limited their employment options to that of the working class. However, the students *chose* not to participate in the labor reproduction system. In other words, they are not subordinated and reproduced by the system, but rather *reproduce themselves*.

Ogbu (1987) aims to explain how some minority groups achieve academic success while others lag behind. Through his comparative ethnographic approach, he differentiates between two types of minority groups, immigrant minorities and involuntary minorities. Immigrant minorities come to the U.S. voluntarily, according to Ogbu, and exhibit cultural *differences in content* that exist prior to arrival in the U.S. (1987, p. 322). Immigrant minorities are academically successful because they “accommodate without assimilating” (Gibson & Ogbu, 1991), and perceive difficulties as challenges to be overcome rather than threats to be avoided, according to Ogbu. Involuntary minorities are either descendants of slaves, colonized, or conquered peoples, and exhibit cultural *differences in style* that result in response to subjugation. This oppositional approach is enacted through beliefs and practices, or *cultural inversion* (Ogbu 1987, p. 323), that positions one’s self or one’s group against the beliefs and practices of the dominant group. One outcome of cultural inversion is the designation of academic achievement in terms of middle-class, “white” values, with which members of involuntary minorities do not engage. For Ogbu, this explains why immigrant minorities experience higher levels of upward economic mobility

than that of their involuntary minority counterparts.

The research findings of Willis and Ogbu seem to be similar. Where Willis' white, working-class "lads" position themselves oppositionally to the authority of their teachers, Ogbu's "involuntary minorities" (namely African-Americans and Mexican-Americans), practice cultural inversion to resist what they perceive as the white, middle-class value of academic achievement. Both are reactionary responses to what are perceived as threats, where one group is marginalized by class, the other is by race. However, Willis maintains a Marxist view. The lad's cultural views "penetrate" the ideology of meritocracy. They see through it as a myth and hence do not buy into it, resisting and not doing well in school. Ogbu's analysis is simpler, they simply develop an oppositional culture.

Foley (2004) provides a critique of the work of Ogbu and disentangles interpretations of the work of both Willis and Ogbu. First, Foley differentiates Ogbu from previous research that framed academic disengagement from a cultural deficit perspective by noting that Ogbu considers the attitudes and practices of involuntary minorities to be an adaptation, rather than an inherent cultural trait (p. 388). Next, he brings to light the different ways in which Willis and Ogbu framed their research participants. Willis, "portrays his lads as heroic working-class rebels who preserve the honor of their class" (p. 389). To Ogbu, "the non-conforming African-American youth are essentially losers" (p. 389). Foley's analysis leads him to assert that Willis maintained a degree of self-reflexivity as an ethnographer, acknowledging his own working-class roots and championing the boys. Ogbu never appears to have engaged in a conversation about his Nigerian immigrant background (which would place him in the immigrant minority group, rather than the involuntary minority group). Foley states that Ogbu is, "a liberal social reformer with a strong moral agenda to lift his wayward subjects into a middle class way of life", however he is also, "the classic

‘outside ethnographer’ who sees African-Americans through African eyes and laments and moralizes about what they have lost and have failed to achieve” (p. 389). This critique of Ogbu implores current ethnographers to consider their own –emic/-etic lenses as they conduct research.

Ogbu also addresses the concept of a dual frame of reference. Or, that immigrant students view the educational opportunities they have in the U.S. as superior to those they would have had in their home country. This leads them to be more invested in educational endeavors than their involuntary migrant counterparts. Valenzuela’s *Subtractive Schooling* (1999) challenges this idea by providing examples of how Mexican students now in the U.S. felt the Mexican schools they previously attended were more caring, i.e., that American schools were not held in high esteem. Valenzuela’s work is also important, especially in the case of the middle-school aged Mexican males with whom I work, because it contends that U.S. school environments assimilate students in a subtractive nature. Put another way, “Subtractive schooling encompasses subtractively assimilationist policies and practices that are designed to divest Mexican students of their culture and language” (Valenzuela, 1999, p. 20).

Valenzuela draws upon caring theory (Noddings, 1984), and social capital theory in theoretically framing her study. Succinctly, the Mexican-born students Valenzuela worked with perceived that their teachers valued technical, impersonal interactions (goals and strategies via a standardized curriculum) over expressive discourse (an approach that emphasizes the affective domain in teaching). This goes against the grain of Mexican culture, which considers, “*Educación* as a conceptually broader term than its English language cognate. It refers to the family’s role of inculcating in children a sense of moral, social, and personal responsibility and serves as the foundation for all other learning” (p. 23). She also contends that the U.S.-born youth in her study were “socially de-capitalized”, as evidenced by a lack of “academically oriented networks among

them – but also (by) their disaffection from a highly unequal system of rewards and privileges” (p. 29). In this way Valenzuela is able to show how Mexican immigrant students and Mexican American students are subtractively schooled from a cultural assimilationist perspective, and in the way the curricula are structured.

Social Identity Development and Methodological Approaches

In the final section of this literature review I will address the topic of social identity development in two parts. In the first part I will consider methods linguistic anthropologists have used to study identity formation. In the second part I focus on relevant literature on gender and identity development in education.

In response to the question, ‘*Is “Identity” the New Culture?*’, Norma Gonzalez stated,

It is through and by language and discursive practices that selfhoods are constructed, identities are forged, and social processes are enacted. As a constitutive force, language shapes the shifting ethnoscape and multiple identities that emerge from the interculturality of multiple knowledge bases (1999, p. 433).

Therefore, it is important to begin with methodological considerations of how social identities are developed within discourse practices. Wortham (2006), views social identification as a process, explaining that,

Individuals behave in certain ways or possess certain characteristics and those behaviors or characteristics are interpreted by the individual and by others as signs of identity, as indications that the individual belongs to a recognized social type. We can identify people by referring to or by reacting to their characteristics and behaviors, but in either case all social identification happens in practice (p. 30).

He draws from linguistic anthropology and discourse analysis techniques in explaining how processes of social identification and academic learning are interdependent. This study builds upon Wortham’s work to consider how the ways in which the social identities of middle-school Mexican(-American) boys are produced within social interaction. I engage with Wortham’s models of identity concept in more depth in Chapter 6.

Rymes (2001) also uses discourse analysis for the purpose of understanding aspects of social identity development among urban high school students. In contrast to Wortham, however, Rymes' focus is on how individuals narrate their lives. As she explains,

Through its temporal unfolding, narrative also creates a speaker's emergent identity. Narrative meaning is evolving, not static or traditionally logical, and allows the individual to portray life as a continuum of necessary choices, with moral milestones along the way (p. 24).

This approach is useful in analyzing not only how others interpret behaviors and characteristics, but also how actors present themselves and narrate their own life experiences to those around them.

De Fina (2003) identifies three ways in which individuals utilize narratives to convey a sense of self. On one level, individuals can draw upon commonly understood narrative resources to narrate a story (p. 19). This means that a child may articulate the same event one way to a teacher, using a more formal register or speaking in grammatically correct sentences, while conveying the same event differently at home to their siblings, possibly code-switching or engaging in some type of performativity. On another level, the type of storytelling can involve a negotiation of identity, communicating how the individual relates (or chooses not to relate) to the world around them (p. 19). This type of narrative can take the form of a student explaining events occurring at the school to individuals in the home, or vice-versa. In either case, this level allows the student to cast themselves in certain social roles. In the third level, De Fina explains that narratives of the self can be used to identify oneself as a member of a group, "expressed through processes of categorization and labeling and... often defined by the adherence to values, beliefs and behaviors" (p. 21).

Another linguistic issue in this study is my choice of language use (English, Spanish, *Spanglish*, or Caló) as a critical ethnographer/mentor when interacting with the youth. Following

Heller (1982) my approach to the “use of language in everyday life is an extreme awareness of language, a new way of holding conversations that involves the negotiation of languages choices in every interaction” (p. 109). In analyzing the social formation of identity, then, I considered: (a) how the behaviors and characteristics displayed by students are interpreted by myself and their peers (Wortham); (b) how the students utilize narrative forms to portray their own identity (Rymes); (c) the levels at which students narrate themselves in particular styles, relations, and – emic/-etic categories (De Fina); and, (d) with self-awareness of (a)-(c), as well as language choice and code-switching used to position oneself as ethnographer/community member (Heller).

Gender is obviously a critically important aspect of social identity formation. While much of the research on Latino youth and gender has been founded upon problematic gender binaries and heteronormative assumptions, still some of the findings are relevant to this study. In writing about gender and education, Portes and Rumbaut (2001), for example, state that, “gender enters the picture in an important way because of the different roles that boys and girls occupy during adolescence and the different ways in which they are socialized” (p. 64). The authors find that boys have set lower educational goals for themselves when compared with girls, earn lower grades, and overall are academically less engaged. Lopez (2003) reports similar findings when comparing the educational experiences of immigrant minority group girls and boys in New York City. Sáenz and Ponjuan (2009) also document how these gender disparities in academic engagement lead to thinning ranks of Latino males in higher education.

Valenzuela (1999) also notes gender differences in her account, reporting that,

...females exhibit a clear pattern of being the providers of academic-related support, especially to their male friends and boyfriends. This support ranges from giving advice on courses, translating assignments, offering encouragement to stay in school, acting as a sounding board for problems, and providing assistance on written assignments and exams (p. 143).

Had Valenzuela observed this pattern of behavior twenty years later, she might have

described it terms of women performing more emotional labor in the service of their male counterparts.

Félix-Ortiz, Ankney, Brodie, & Rodinsky (2012) deconstruct Latino male identity in relation to historical and contemporary definitions of *machismo* in an attempt to better understand Latino male identity formation. They suggest that ecological theory may be helpful in understanding how Latino male identity develops socially, “two proximal environments/contexts might be most important in determining the Latino man’s behavior: the male peer network and his relationship with his partner” (p. 147). The ‘partner’ aspect may not always be directly applicable when working with middle-school boys. However, the male-female relationships they observe in the home and community are ethnographically important when considering identity formation among youth. When the thread of gender is acknowledged within discourse/narrative analysis as discussed earlier, more can be understood about this aspect of social identity formation.

In sum, discourse analysis methods are useful in documenting and analyzing how processes of identity formation in social interactions. By observing classroom interactions and how teachers and peers frame students based on behaviors and characteristics over time, it is possible to capture how academic identities emerge over time. The way students tell stories about their lives and themselves also provides a lens for interpreting how they understand themselves. Additionally, students’ use narratives to cast themselves in various social roles, including as members of certain groups. Language choice among researchers and participants is also important to consider in studies of social identity formation such as this one. Language choice and code-switching indexes how actors socially cast (and identify) persons to whom they are speaking. Finally, gender and identity were briefly discussed as they pertain to social identity formation and

educational engagement.

Having engaged with the central literatures and theoretical frameworks that have inspired the project and the analysis which follows, I turn in the next chapter to describe the methodology used in implementing and documenting the project.

CHAPTER 3: Ethnographic Approach

This chapter will provide a connection from the concepts of critical ethnography and critical pedagogy, described in the literature review, to the approach I applied when designing the research project. I begin with a reflection as a critical ethnographer, an attempt at transparency when considering the ethnographer as qualitative research instrument. I include relevant background information on how I chose the setting, the preliminary research that led to the current study, and why Marshall was well suited for the research questions I sought to answer. I describe how I came to know the participants through the local school and community center and provide ethnographic portraits of the boys themselves. I conclude with details regarding the data collection methods, the structure of our sessions, and the process I followed for analyzing the codes and themes that emerged from the data. Before an explanation of the more traditional methods involved in ethnographic investigation such as participant selection, data collection and analysis, it is worth stepping back here to consider the importance of reflexivity for the critical ethnographer. With that in mind, I would like to provide some context to my involvement with research in Marshall.

When Ernest Morrell, coauthor of the *The Art of Critical Pedagogy* (2008), visited the University of Pennsylvania's Graduate School of Education (Penn GSE) as the featured speaker for the Race in the Academy Lecture Series on February 7, 2013, he spoke of being a critical researcher as a process, not learning to, or an identity shift, but becoming and emergent, "to become a certain kind of person". He also alluded to the need for reflexivity with participants, telling his audience, "You've got to tell them your story, so that they can begin to tell theirs". So with that in mind I share with the reader my own background as a researcher and also some waypoints of my own educational trajectory that I shared with the boys during our conversations.

My initial academic advisor was Stanton Wortham, who produced breakthrough work on the Linguistic Anthropology of Education (2003). He was a student of Michael Silverstein and a contemporary of Asif Agha (with whom I took linguistic anthropology coursework). Taken together, these scholars have made significant contributions to the field of linguistic anthropology and specifically the social domain of language use in the field. Later, I was advised by Kathleen D. Hall, a cultural anthropologist who is well known for her extensive fieldwork with Sikh youth in Britain. She was an advisee of Bernard Cohn and student of John and Jean Comaroff. Both Drs. Wortham and Hall were trained at the University of Chicago and later continued to practice ethnography at the University of Pennsylvania. It was at Penn GSE that I began my training in the foundations of linguistic and cultural anthropology with the influence that Dell Hymes had on shaping the ethnographic tradition there. Coursework on the methodologies of discourse analysis in educational linguistics, and the Marxist theory that connected social science research to ethnography helped shaped my understanding of how I could investigate the learning experiences of Latino boys in Marshall⁷. Especially helpful was the work of John L. Jackson and his ethnography of Black Hebrew Israelites in *Thin Description* (2013). His assertion that there is no “two-field world” where the ethnographer exists apart from their participants attuned me to how I wanted to interact with the boys in a transparent and reflexive way during the research project.

With this training in mind I share here a summary of my formal educational experiences as I related them to the boys at various points during our conversations. I share these for the purpose of positioning myself relative to the categories of high-achieving and at-risk. These experiences also perhaps provide some insight regarding my critique of schooling experiences.

- K-12: my parents were regularly contacted by teachers and administrators for

⁷ This list is long, but primary the work of Paul Willis, Sofia Villenas, and Brad Levinson come to mind.

conferences to address my problematic disposition. The teachers would lament my “lost” potential due to my disaffected or disengaged nature.

- Attended summer school every summer from seventh to eleventh grade (due to failing one or two classes per year, usually for not completing assignments. Standardized test scores were usually above the median)
- Graduated 294th out of 418 in my high school class. My high school counselor informed me that I should consider the military or community college and declined to help me with any other types of applications. I was provisionally admitted to Texas A&M University – College Station (likely due to letters of recommendation from two teachers who recognized my aspirations). This meant I had to maintain a 3.0 (on a 4.0 scale) during the summer between my senior year of high school and my freshman year of college in order to be accepted for the fall term. It was effectively an additional summer school term.
- Graduated undergraduate (B.S.) with a 2.23 GPA. I knew learning was important and was always reading in fields of my own interest, but had a difficult time meeting the expectations of professors at a large public land-grant university in classes with hundreds of students. I was usually not engaged in the classwork enough to distinguish myself until the last semester to two, in senior-seminar type classes where the professor to student ratio was much lower.
- Began work as a Bilingual/E.S.L. teacher and spent several months in self-directed study for the Graduate Record Exam (GRE), taking as many practice tests as I could in the University of Texas at Austin library to simulate test conditions.
- Master’s and PhD coursework was much more intimate and (sometimes) self-directed. I had much more latitude in being able to study what interested me. Assignments still mattered, but being intellectually engaged was much more valued. I finished my M.A.

degree with a 3.88 GPA.

- However, by no measure would I have been considered “high-achieving” in my K-16 educational trajectory.

This personal educational history provides a framing for my experiences previous to becoming an educational researcher, but also points to a gap in the literature. What about the experiences of young men of color with educational aspirations who are interested in learning but not considered “high achieving” by institutional measures? Apart from these educational experiences, or perhaps intertwined with them, is the “certain kind of person” I was becoming as a researcher.

Researcher

Chicano – it took me a long time to figure that one out. No matter that I came out of one of the epicenters of the Chicano civil rights movement, El Paso, Texas, a.k.a. El Chuco. Never mind that my Pops had literally and figuratively fought his way out of the Segundo Barrio. At age 11, Mom moving from dusty Parral, Chihuahua, to AMERICA! El Paso. Might as well have been New York City. And we were AMERICANS. Adjusting our English pronunciation so we wouldn’t sound so Mexican, even if Pops still said ‘sangwich’. And the redness that flooded my face when I said it my first year of college, causing a girl to giggle, far removed from the safety of the border.

Identity evolving over time – an American child, Mexican-American adolescent, young adult Texan, graduate school Tejano, Chicano, perhaps Chicanx – a semiotic strike against the patriarchy of gendered nouns. Then, a Chicanx/Xicanx ethnographer in a Mexican Diaspora town. “De la frontera, El Paso”, was my typical response when Spanish-speaking Marshallites asked where I was from. Their typical response being, “Oh”. *From* them, but not *of* them. Indexing my parents’ homelands, Chihuahua and Durango, rarely helped. It only associated me

with the Norteños, the pointy-booted, taco-shaped cowboy-hatted Mexicanos of the desert. With time I would learn the Diaspora in Marshall hailed from central and southern states and even amongst themselves occurred degrees of othering. These distinctions index what Norma Mendoza-Denton terms “hemispheric localism” (2008, p. 86), where norte and sur become metonyms for Global North (Chicanos) and Global South (Mexicanos)⁸.

Factoring into my outsider status was my background in U.S. higher education. The inside of those Mexican Marshall bodegas stocked with *Goya* canned goods and *Valentina* hot sauce looked just like the South El Paso corner stores I had visited as a child. But outside, on the streets, my corporeal disposition betrayed me. Shoulder-slouched with bookbag, notepad holstered. Reading a paperback while I waited for my tacos. I fared a little better in the schools, working my classroom teacher experience to my advantage. Although most of the teachers were too rushed and overloaded with tasks to care.

Becoming – from ESL Teacher to Anthropologist

The doctoral course work was winding down – in it Evans-Pritchard at the edge of the village, Malinowski and the Kula, Geertz urging Wolfian description, Turner illuminating the threshold. To become an anthropologist⁹, I decided it would be necessary to follow suit. In the spring of 2011, my partner Jennie and I packed our belongings – setting ourselves on the expressway north to Marshall. A humble duplex, a vacant opposite, we began the experiment. An aged, but maintained neighborhood, upslope of the river. Empty-nesters and long-term residents, many were curious why a doctoral student and his partner would willingly move from West Philadelphia to Marshall. Surely the rumors of its “decay” – and all that insinuates, had not

⁸ See Chapter 3 of Mendoza-Denton’s *Homegirls* for an in-depth analysis of Norte-Sur government, school and research perspectives.

⁹ Later I would come to understand how my embrace of the traditional anthropological fieldwork path is at odds with the critical anthropological perspective I was in the process of developing.

escaped our attention.

Even native Marshallites then residing in Philadelphia reacted gape-mouthed – some type of regression, their demeanor implied. I had lived abroad in seven countries – each time for months or years – enough to know there is no substitute for shoe leather. One comes to know a place in relation to one's own body. I was wary of the researcher (I had been one myself for three years previous) that would commute in, sit in a classroom or meeting for an hour or two then return home to write their notes and formulations of Marshall's reality in the comfort provided by the distance from the space of which they were claiming to produce knowledge.

I will say here that I make no absolutist objective knowledge claims as part of three years of living-in-“the-field”. It only gave me a more intimate sense, a more constant contact with the Marshall the boys know and the adjoining areas to which they were seldom granted access. I heard the gunshots, I sat taking fieldnotes alongside the redolent pub deli drunks, tasted the too-sweet horchata, had my clothes soaked with the stale frying oil aerosol particulate of neighborhood taquerias. I salted my sidewalks in the winter and sweltered lawnmowing in the sultry August afternoons. Becoming an anthropologist along the way.

Preliminary Studies

My previous experience with this strand of inquiry began in 2008 when I started working as a research assistant in Marshall helping to create a teacher training video regarding Spanish-speaking parent involvement for the Marshall School District. The film project also resulted in the formation of a Latino parent leadership council, whose role was to communicate the concerns of the Latino parents to the school district leadership. Another outcome of the project was the establishment of weekly after-school ‘homework help centers’, at some of the elementary school campuses. I worked with the teachers to demonstrate to the parents how to most effectively help

their children complete their homework assignments, and also helped communicate both teacher and parent expectations regarding student work during these sessions.

As I became interested in the educational trajectories of Latino youth in Marshall, I started interacting with 18-24 year-old males via a soccer league run by a local Mexican business owner. I spent weekends for two summers attending games hosted at the suburban middle-school campus¹⁰. My interactions in this setting led me to two conclusions: first, by the time many of these young men had reached the ages of 18 to 24, they had professional trajectories in mind that largely excluded higher education; second, there was a younger 12-14 year-old Latino male population in attendance at these games that had no organized soccer league of their own (due to limited fields around Marshall) and had not arrived at conclusions regarding their professional trajectories. These conclusions along with outcomes data suggesting Latino males are ‘vanishing’ from higher education settings (Sáenz & Ponjuan, 2009), led me to the work that resulted in this dissertation project.

Beginning in the fall of 2012, I began volunteering at the Central middle-school campus in Marshall. Working with a male African-American counselor as the campus liaison, I spent the fall semester visiting about twice a month and doing ‘cafeteria duty’, meeting the students in grades 5-8 and their teachers, and talking to prospective research participants. During the spring 2013 semester I increased the frequency of my visits to once a week. I noticed a large developmental range between fifth grade boys and eighth grade boys. Knowing that my dissertation research would not begin until the following fall, and that the 8th graders would be at the high school campus by then, I decided to exclude them from the prospective pool. In speaking with 6th and 7th grade boys, there seemed to be some degree of awareness of higher education

¹⁰ See Appendix for a fieldnotes excerpt regarding this fieldwork.

possibilities and I consulted with the teachers at these grade levels to create a list of Latino boys who might be interested in participating in the research project.

While not all students suggested to me showed interest in participating in the research, in the summer of 2013 I began to carry out a pilot study with five Latino boys (all of Mexican heritage) whose parents had consented to their participation. Meeting twice a week on Wednesday and Saturday afternoons, at the Culture and Education Center (CEC) tech room, we began exploring their interests relating to computer programming and digital literacy. These meetings began with step-by-step procedures on creating and managing an email account, exploring software programming accessible to youth on web-based interfaces like buzztouch.com, scratch.mit.edu, and codecademy.com. In addition, we began exploring their vocabular universe (Freire, 1973) as it related to digital media, specifically starting with them listing the films they enjoy. –Emic in nature, this approach allows the participant to name the elements in their world. What followed was spending one hour of our Wednesday meetings closely watching one of the films they suggested in 20-minute segments, critically viewing and responding to the narrative of the film while drawing comparisons to their own lived experience.

This brings me back to what was perhaps the first preliminary study I conducted as a high school E.S.L. teacher. The following is an excerpt from my 2007 statement of purpose as part of the Penn GSE Ph.D. program application:

It is my intention to investigate the ways in which recent Spanish speaking immigrants negotiate their identities and acquire language through dialogic literature circles... (In the circles) the students were alert and engaged and began the process of critically placing themselves as co-creators of their new community. However, what I lacked at the time was a method by which I could capture all of the rich and multi-layered discourse occurring before me.

As I reflect on that statement, I am pleased that all of the training and experience I have received in ethnographic methods has provided me with exactly the tools I need to capture the processes I

was witnessing in a classroom in Austin, Texas twelve years ago.

The Study

When I first proposed the study, I intended to implement Freirian Critical Pedagogy, specifically his ‘culture circle’ practices along with the boys’ exploration of digital creative software and an instructional website on software coding. We began by engaging in conversations about the nature of education and schooling and their own individual notions of success. I also asked the boys about their own technological and digital media related interests and experiences in order to solicit both -emic perspectives (for anthropological validity) and prompt their vocabular universe (a Freirian pre-requisite), which is to say I wanted to hear *what* they talked about and *how* they talked about these interests.

My initial hypothesis was that if the boys had the latitude to explore these programs (technology, hardware/software not available in their school), with a mentor on hand to aid in problem solving there would emerge a more sustained, invested, and profound learning than was available via traditional schooling mechanisms that the boys described from their own experiences. Further, this engaged self-directed learning would foster an emergent identity as a learner/expert. This means that they would begin to describe themselves and each other as being knowledgeable and proficient in certain tech-related practices. Building on this emergent identity – conversations with a mentor regarding higher education could catalyze a type of conscientization, or critical consciousness about their transformative power in the world. Specifically, how they could use their newly developed tech expertise to transform the perceived possible futures for themselves as individuals.

The units of analysis were their ‘social interactions’, specifically the unique nature of their speech events and level of kinesthetic engagement between participant-participant,

participant-researcher, and participant-media, gathered primarily via audio recordings and fieldnotes. Later, the framework provided in *Pedagogy of the Oppressed* (1973) would provide insight on how researcher-media interactions would illuminate limit-situations and limit acts the boys incurred during these interactions and learning processes.

Some of the first few sessions we held in the summer of 2013 included explicit exercises on prompting their vocabular universe. In this case, we agreed on watching *The Hunger Games* together as it was a movie they had all seen. Discussing it together would allow me to better understand the words and phrases that the boys used in everyday conversation. The film provided excellent opportunities to discuss topics of power, disenfranchisement, oppression, structural inequity and individual agency – all themes central to critical pedagogy. I documented these discussions via audio recordings and fieldnotes as well.

Setting(s): Marshall – The End of the Line

“Why would you move to Marshall?” This question, offered with a tone of incredulity, was the one asked most often of me by Philadelphia area residents familiar with the borough. As if someone with the means to live anywhere else in the region had made a grave error by choosing to reside in Marshall. Indeed, its reputation was one of a long-faded industrial town, now overrun with poverty and crime. It is the poorest municipality in one of Pennsylvania’s largest, richest counties. In most cases, when asked the question, I’d shrug my shoulders and curtly reply, “for work”, a little embarrassed myself for having placed my partner and I in this category of perceived socio-economic failure. Maybe this would be my entrée into the psychological environs my participants inhabited most of their lives, not that one could assume or essentialize the psychological disposition of one’s participants. Maybe the most valuable part of anthropologically “living in the field” wasn’t what all of the structuralist anthropology books had to tell me, but the way that question made me feel. Even as a temporary condition, even as a

doctoral student and researcher at an esteemed east coast university - in having my personal worth/reputation of how people perceived me as an individual tied up with this place began to set up barriers - both psychological and social. Living outside of Philadelphia constricted the social circles we previously enjoyed. Of course, the difference between my participants and myself was one of experience. I had the background and training to understand how linguistic and cultural practices operated to place individuals in social categories, and how notions of power (or lack of) radiated out from those categories. I also had the means, should I choose to, to move out of Marshall. To a comfy suburb with coffee shops in which to write, or a hip urban neighborhood in Philly where I could find organic produce at the local park at the farmer's market on Saturday mornings. My participants and their parents were largely unaware of such possibilities, and even if aware they were so focused on day-to-day survival that such imaginings were a luxury. Just a few miles away, but a far-removed possibility.

I had no interest in being an "educational anthropologist" who performed their research solely in the schoolhouse without being in the community. I wanted to know what it was like to walk the streets. Shoe leather. To navigate the neglected and uneven sidewalks, to find a brief moment of shade under a residential street tree canopy in the August swelter, to hear the raucous play of children as they walked by our house after being released from school for the day. Other things: sirens- almost every night, footsteps crushing gravel in the alley behind our house at odd hours and the uneasy feeling it brought not knowing who might be so close to our backdoor. Food deserts - having to travel out past the boundaries of the borough, to more affluent surrounding townships, just to get something to eat that wasn't prepackaged, deep-fried, or pesticide-laden. The train station - the hub of public transportation to Philadelphia where working, middle, and upper-middle class passengers stood at the platforms and sat in the train cars shoulder to shoulder, bleary-eyed early mornings and weary cold evenings when the sun sets at 5 pm. The tedium of

the hour long ride from Center City Philadelphia to Marshall, watching other passengers disembark at earlier, more affluent stops, before finding yourself at the end of the line.

For more than a century Marshall has been a way station, allowing generations of immigrants – German, Polish, Italian, Irish, and Mexicans, along with African-Americans from southern rural and northern metropolitan areas a place to settle, and accumulate various forms of intergenerational capital. This produced a majestic built environment in the early 20th century, only to have subsequent generations take their accumulated wealth into the suburbs and exurbs as industry moved overseas and new and unfamiliar ethnic groups moving into Marshall corroded the sense of place long-term residents had created for themselves. There are, of course, those long-term residents to whom Marshall is like a tidepool – holding them in a sort of working-class socio-economic stasis.

Marshall has in recent decades experienced dramatic growth of its Latino population. In 1990, the reported Hispanic population made up 2.7% of the total, twenty years later, the 2010 Census put the Hispanic population at 28.3% (U.S. Census Bureau, 2010). During this recent time, many longstanding residents have come to understand their new neighbors in different ways. Common are comparisons to waves of past immigrants, mainly Irish and Italian. Longstanding residents of these ancestries tell stories of difficulties, mistreatment suffered by their parents and grandparents, along with stories of perseverance, economic success and eventual assimilation into “American” life. Alongside this immigrant narrative is the experience of African-Americans in the community, comprising 35.9% of Marshall’s population in 2010 (U.S. Census Bureau, 2010). Many African-American residents trace their path to Marshall via exodus from the agricultural south in the mid-twentieth century or movement from Philadelphia’s high urban density to the outlying areas during the decline of Philadelphia’s industry in the latter half

of the twentieth century.

In addition to the racial and ethnic diversity of Marshall, there is also entrenched economic inequality. Once bustling, now-defunct industry, Marshall's role as county seat, and often-corrupted political power helped place historically accumulated wealth in the hands of a few. This economic inequality is evidenced by privately-owned large and ornate structures, some on the National Register of Historic Places, that have incorporated blighted neighborhoods of high-density row homes in the town center.

As a town with diverse histories and trajectories, this landscape is further complicated by the rise of trans-nationalism in recent decades. This phenomenon has differentiated Marshall's Latino migrant community from past waves of immigrants. Whereas a century ago Irish and Italian immigrants in Marshall largely settled in a unidirectional manner, advances in technology and travel have allowed for the transnational Latino community in Marshall to maintain a connection with their places of origin. Specifically, these advances have created a trans-national Mexican migrant community in Marshall that sends financial remittances, imports sundry Mexican goods such as culinary products, music, film, sporting goods, and fashion; and maintains cultural practices within the community including religious festivals and choreography troupes. It is also common to meet Mexican-origin families where one or more members resides, works, or travels between their place of origin and Marshall. It is this transnational community nestled within the diverse population of Marshall that creates a dynamic setting in which middle-school aged Latino boys are socially interacting at various levels and coming to make sense of their educational trajectories and potential.

Marshall has a population of 34,324 that resides within the 3.5 square miles. Rectangular in shape, it is bound on the south by a river, railroad, and Main street - all running parallel to each

other. To the north, and in sharp contrast to the narrow historic dilapidated main street is a modern multi-lane thoroughfare beset on either side by strip malls and big box commerce. To the east and west - sleepy suburban townships, wealthier than Marshall and sprinkled with golf courses and office parks.

For the most part, pedestrian access ends at the Marshall borough limits. This, of course, is by design. It makes access to automobile transportation a necessary expense, though some Marshallites wait for the hourly buses or the more costly regional rail for their daily commutes. All of this is to say – Marshall itself is constricted, and with the constriction of geographies comes the constriction of possibilities. It's certainly not a unique built environment phenomenon, but one that evolved out of the complexity of the inter-ethnic relations and socio-economic divides mentioned above.

This urban geography and history provide the context for the daily lived experience of the boys. Most live in the dense rowhomes of central Marshall, reminiscent of deep south Philadelphia, the narrow streets on which the boys reside are stark, often congested with parked cars on both sides, allowing for only one direction of auto traffic, despite no such official designation. These entrenched grids restrict recreational activities afforded to their peers just one township over. Though Marshall is not absent of green spaces or sports fields – the urban terrain that must be traversed from home to greenspace is perceived by many families as dangerous, even in the light of day. As such, the boys report they seldom engage in informal team sports like pick-up basketball or soccer games. Occasionally they risk throwing a football on their block with friends but even that activity can be perceived as fraught with danger when they must contend with shootings, sirens, or even groups of brawling teenagers.

In describing these geographical and recreational restrictions, I am attempting to provide

the reader with a glimpse into the boys' daily, lived experience. One where low-performing schools over-regiment their curricula and enforce zero-tolerance discipline policies. A place where recreation requires either fees paid to a youth league or risks taken in streets deemed unsafe. In a place like this, 'exploration' may as well refer to NASA missions. It is a place where even a dilapidated gym with no air-conditioning in the summer becomes an oasis, and the ability to sit in front of a new iMac desktop computer once a week becomes a valued pastime. The boys are resourceful, but even resourcefulness requires that resources exist in the first place.

Family¹¹

What can I tell the reader about the families and home environments of the boys? How about a portrait of Alex's little sister's birthday party – sure I've got a few pages of fieldnotes on the event. But what I really like about re-reading fieldnotes aren't the descriptions as much as the emotions, the feelings that slip into the ether just moments after an encounter. The ethnographer as the instrument, the internal affective barometer. I was thrilled to be invited by Alex to the event. I remember wearing a casual shirt with buttons, Jennie wore a summer dress. We brought a gift for the pre-teen birthday girl.

Alex identifies as mixed-race. His father is from Mexico – with a stocky build and a milk chocolate complexion. His mother is white, with an Italian surname. Her hard-edged visage belies her 35 years of life, but her jovial disposition is welcoming. When we arrived Alex's parents escorted us through the first floor living room and kitchen of their narrow central Marshall rowhome.

Once outside in their cramped yard, Alex's father was physically, socially, and linguistically marginalized. He offered me a beer in Spanish and we stood next to the ice chest

¹¹ For a reflection on how this family portrait is problematic, please see Chapter Seven.

with our backs to the wooden fence, looking straight ahead and sipping our beers, the way I imagine men have since the dawn of backyard barbecues. Our exchanges were sparing. In Spanish I asked about his daughter and his work. He explained he had accompanied her to the King of Prussia mall to shop for a birthday dress and how all of the walking and standing caused his knees to ache because he spends a lot of time painting baseboards and can't wear kneepads because they scratch his clients' wooden floors. We stood together, alone, for about half an hour. Twenty feet away the rest of the party continued in English.

I remember feeling uneasy. Not sure of how to behave. There was raucous, rough teasing among extended family members, an uncle manning the barbecue grill – drunk and verbally abusive, though no one said anything to him. (Later Alex would tell me that his uncle's stepdaughter had recently died of a strange allergic reaction in the middle of the night and that his uncle suffered intense grief.) Cousins playing. Drunk uncle flipping burgers and hurling invective about, “no Mexican food because the beans fall through the grill”. Alex's dad seemed accustomed to the racialized ribbing and mumbled something non-aggressively. Jennie sat talking with Alex's mom, but we exchanged nervous glances – uncomfortable in our passivity. Older cousins, young men, came and went through the back alley gate. Lifting their shirts to show off fresh tattoos and remarking about female genital piercings.

There was something exhausting about the whole ordeal, I remember. The effort required to remain cordial among the normalized coarseness. And continuously self-monitoring my middle-class habitus without seeming standoffish, reminding myself I was Alex's informal mentor. Regardless, it was a very kind invitation and I had to couch my own classed psychological response in the greater context that the ribald exchanges I'd witnessed were a part of his daily lived experience. And it was a good day.

Alex has a mostly stable home life. Not all of the boys come from a two-parent household or from a family with the means to host birthday parties to which they invite starchy ethnographers. So the aforementioned portrait is skewed toward the positive – too many, too painful to offer full expositions are the traumatic stories relayed to me by the boys about beatings with wire hangers, fathers abandoning them and starting “new” families in Mexico, police serving 6am warrants in shared bedrooms, a disabled mother weeping helplessly as intruders burglarized her home.

And here I am asking these boys if they would like to learn how to code, how to design graphics or 3-D models. And they answered yes. So though Marshall can be a tough place to grow up, and families can each be unhappy in their own way, the boys aspired to learn, on their own time and in their own ways.

Research Site

The Culture and Education Center (CEC) was founded in December of 2011, it is a 501c3 organization whose mission statement is to “empower the Hispanic community” through its programs. Most attendees to its programs come from the Mexican Diaspora community, and the director himself is of Mexican origin. It is operated in conjunction with the local Catholic diocese, though the programming is secular in nature. Located in a four-level red brick building on the eastern edge of Main St., the interior was converted from an Order of Sons of Italy in America (OSIA) social/fraternal club in use from 1934-1978¹².

¹² The Historical Society of Hamilton County provided the following information: the building was constructed in 1900. The property is used as a social/fraternal club - LAM Club. LAM means Lodge (Loggio) Antonia Meucci #306 - Sons of Italy. The first lodge of the Order of Sons of Italy in America (OSIA) appeared in Marshall in 1914 when Lodge #306 Antonio Meucci (LAM) was formed. LAM began occupying the building in 1934. One of the organizations which assisted with the Holy Saviour Parish history was listed as "Italy in America, successor to Lodge Antonio

After meeting with the Center's director and explaining my proposed research project he encouraged me to make use of their technology room. A recent grant had provided eight brand-new iMac computers – each outfitted with a 27-inch display, a wireless keyboard and a wireless mouse. The machines were state of the art and loaded with Microsoft Office Suite, Adobe Creative Suite including Adobe Illustrator and In-Design, and Internet Browser software. Both the hardware and software available in the CEC tech room were more advanced than what was available to the students at school and at home. The iMacs also had iMovie and Garage Band software for creating film and music projects, respectively. The director explained to me that they had opened their doors only a few months previous and were eager to make the facilities available to the community.

In addition to the technology room there was also a large social space on the second floor with a full kitchen, dining/meeting space, a full-size gymnasium with a hardwood floor basketball court, and a stage wired with a public address system for performances. The CEC hosted a variety of programs, from adult computer literacy classes to Mexican folkloric dance lessons as well as summer arts and sports camps for school-aged children. Because the director's principal duties required his presence at the community college, he had hired an assistant to open the technology room twice a week to offer after-school homework help for elementary and middle-school aged students. The leadership at CEC generously made the technology room available to our group for digital literacy activities.

The School

I developed relationships with the counselors, administrators, and teachers at Central

Marshall Middle School, an historic early 20th century Art Deco building a block away from our duplex. One of the counselors and the relatively new principal were both Marshall school district products, and this made them familiar with the community and the needs of the students, but I contend that it also pre-conditioned them to institutional structures that prevent new ways of being for the students - and can function as a continuance of 'the way things are done'. Many of the schools in this primarily working-class town perennially struggle to meet state standardized-testing requirements. And this results in highly structured curricula, high rates of administrative and faculty turnover, and a rigid, carceral-like school environment - in which students can be punished for an infraction as innocuous as talking in the cafeteria.

I spent the next spring semester performing twice-weekly cafeteria volunteer duty in order to meet prospective participants for my dissertation research. I had become familiar with this cafeteria monitor role during my time as an elementary school teacher a decade prior. Considered one of the 'other duties as assigned' in the job description of K-12 teachers, it is a responsibility that rotates between teachers on a weekly basis and is often loathed because it effectively eliminates the lunch break. That I was willing to volunteer my time to monitor behavior in a cafeteria with nearly 200 students was a gesture appreciated by the faculty and staff. At the same time, my outsider status was made clear when an office support staff member with whom I was on a first-name basis and had interacted with dozens of times warned me that she could make a half-dozen photocopies for me, but it was an exception she would make only once, as I came from an "outside agency".

During this time I observed that Central Marshall M.S. as an institution functioned with modes of normalized security, such as the intercom system outside the main doors that authorized visitors used in order to be 'buzzed in' by office staff, and the identification tags that students,

faculty, staff, and visitors were required to display at all times while on school grounds. Other institutional modes functioned in order to regulate the behavior of the students in a rigid manner that limited their autonomy: mandatory school uniforms, standing silently in single file lines in the hallways, even a microphoned public address system in the cafeteria, the use of which was a signal to the students for absolute silence, with all conversations to coming to a halt. The sum of these features resulted in an environment that had a carceral quality to it. As has been well documented, the deployment of such institutional structures results in what has been termed the school-to-prison pipeline (Rios, 2011).

The Cafeteria

After several weeks of volunteering as a cafeteria monitor and getting to know the names and faces of some of the sixth and seventh grade Latino boys, I became a familiar, if not always welcome, fixture during their lunch. I began in the awkward way of introducing myself as a former teacher and current graduate student who wanted to form a group of Latino boys to attend regularly scheduled meetings at the nearby community center to work on computers. I mentioned they would have access to state-of-the art iMac computers and time to explore different types of computer programs. I initially framed the experience as good preparation for college and stated that most college level work required a high level of computer proficiency. I compared the new iMacs they'd be able to use in a self-directed manner to the computer lab they had on campus, with outdated Windows operating system machines they reported they used primarily for writing research papers. There were varying levels of interest communicated by the boys and at times a palpable sense of negative peer pressure from the less interested students sitting at the same cafeteria tables.

In one instance, I asked some of the seventh grade Latino boys who always seemed to sit together to complete a questionnaire about their interests and educational/professional goals after

we had spent previous lunches discussing how computers related to higher education and different professions. I gave each boy a single-sided questionnaire with five questions and a pencil at the beginning of lunch. When I went to retrieve the completed forms at the end of lunch, one student muttered in a performative manner, “I don’t know nuthin’ about no college”, directed at the 2-3 boys around him, and tossed the blank questionnaire back in my direction, drawing nervous chuckles from the surrounding boys. At the time my concern was that the others would follow suit, and sure enough, five of the boys to whom I had given questionnaires crumpled them up and made sure to wait until I was watching to throw them in the nearby trash cans, making eye contact with me the entire time, an unmistakable act of defiance. The next time I saw these boys I could sense them bracing for my approach, but I thought to give them a few days before reminding them that, “my door is always open”. Overall the interaction reminded me of Paul Willis’ “lads” in *Learning to Labor* (1977) and how they exhibited agency in and by socially reproducing themselves.

Shortly thereafter I had a conversation with another counselor, an African-American Marshall native who was well-known in the community for having received a college football scholarship to a Division-I school. I mentioned to him my difficulty in recruiting students for my study due to the negative peer influence at the cafeteria tables. He suggested I form an ‘ice cream sundae meeting’ once a week in a room just off the cafeteria for the boys that were willing to commit to participating in the study. With this *quid pro quo* set, I slowly transitioned from being the “creepy guy” who invited himself to sit with the Latino kids and asked them too many questions, to simply the “guy” who wants to form a group off-campus to work on iMac computers. For the remainder of the school year, once a week I would bring an ice chest with two to three half-gallon containers of ice cream, chocolate syrup, a can of whipped cream, bowls and utensils.

Ice Cream Meetings

This new arrangement of meeting in the small room adjoining the cafeteria also allowed the individual participants to begin to interact as a group during lunch, because four boys recruited to that point all sat at different cafeteria tables, assigned by homeroom. During our initial ice cream meeting I asked the boys to address me by my first name. This interaction indexed how I was trying to frame power relations between myself and the boys. At the time I was especially interested in egalitarian Quaker education principles and practices in which it is common for students at Friends Schools to address their teachers by their first name. This manner of address is also supported by Frierian principals of equality. The boys seemed to enjoy this novel way of addressing an adult, especially within the school environment. That first instance, Pablo repeated my first name a few times, as though to check and see if there would be any perceived insubordination on my part.

I had invited Mr. H, the counselor that had provided the suggestion for our meeting location, to stop in for ice cream - out of collegiality but also to provide an entree that he could 'supervise' the meeting by dropping in for a few minutes, aware of liability issues and having an "outsider" in the institution. Mr. H. came in and I invited him to help himself to a bowl of ice cream - the boys had already served themselves and he commented disappointedly that the boys had taken all of the cookies-and-cream. As we continued our conversation in his presence, one of the boys calls me, "Mr. Carlos", and I say, "just Carlos", he repeats, "Carlos", and Mr. H. raised his head from scooping his ice cream in alarm - clearly this informality was a violation of institutional norms. I noticed his reaction and explain that in the Quaker tradition of democratic education hierarchy was discouraged, all persons being equal, and I incorporate this aspect into my educational philosophy and ask the boys refer to me by my first name. "Oh," Mr. H. responds, still visibly concerned, - "I had never heard that before." Not necessarily agreeing with the

approach. However, I could sense some empowerment on the part of the boys, their full attention on the conversation I was having with Mr. H. in front of them in the school environment.

In those first meetings the boys served themselves ice cream and laughed and moaned and doubled over about how the ice cream was going to give them diabetes. In this way they used humor to forge a social bond with me and strengthen social bonds among themselves. Humor that would weave itself throughout our time together, creating a series of interactions that would weave us together. Simultaneously, I contend humor functioned as a masculine way of veiling vulnerability and indexed the mechanisms of social conditioning and masculine identity formation that create the basis for that type of interaction, specifically of mitigating vulnerability in a new or unfamiliar social context. On one occasion when checking in on our group, even Mr. H. told a lame knock-knock joke while serving himself a couple of scoops of ice cream, and the boys laughed in an obligated and performative way. It reminded me of the way the use of humor can also serve to strengthen the social hierarchy and inequality of power between authority figures and their subjects. Knock-knocks aside, he is still addressed as Mr. H., and we are still in the school building.

In the last two ice cream meetings of that school year, I brought in my laptop and a small handheld FlipCam and explained to the boys these were two examples of the technology they would be able to explore during the study. For our penultimate meeting, I showed them the FlipCam and its different functions before handing it over and allowing them to play with it. Collaboratively, they chose who would film and how they would take turns. Later, in between the two meetings, I uploaded the video clips to my laptop. The footage revealed playful kids having fun and being goofy while eating ice cream, some more willing to be filmed than others. In our

last meeting at the school, I used my laptop to play the video clips they had recorded and they watched themselves intently on-screen, possibly for the first time. I demonstrated for them how I had downloaded the video from the camera. I also reminded them how one possibility of joining the study over the next year would be to shoot and edit films on the computer as a way of developing technological expertise.

Parent Involvement

Near the end of the school year, I gave each of the prospective participants a letter of introduction in English and Spanish to take home to their parents. The letter stated who I was and the details of the study I was proposing, along with an invitation to a pizza party for the parents and families that I was to host at the community center the following Saturday. My intention was to meet the parents in person, discuss what the goals of the study were in order to gain consent for their sons' participation. It would also give the boys a chance to preview the technology room and the parents would be able to tour the community center.

A couple of the boys informed me that their parents would be unable to attend due to work and/or childcare duties. However, I was able to send consent forms home with them, which they returned to me with a parent's signature and phone number. I followed this up with telephone calls to the parents to introduce myself and tell them about the format of the study. Over the entire course of the study, I met five of the boys' parents in person, the other three boys' parents I only spoke with on the phone. In my experience as a bilingual elementary school teacher, I understood there were varying levels of parent involvement in regards to all students. And in my work co-producing the 2010 film *Sobresalir*, about Latino parent perspectives on Marshall schools, I understood that many parents were invested in their children's education but had never received any instruction on how to best involve themselves in the schooling of their children. Several parents I interviewed for the film spoke about their experiences in Mexico and that there were

different cultural models for parent involvement. They described how all formal educational practices were left to the teacher, effectively placing the child at the schoolhouse door as the extent of their involvement.

Parent involvement for the remainder of the study was limited. In fact, I tacitly discouraged parent attendance in the technology room. In one instance during the first month, one of the mothers, Mrs. M., came in with her three children and stroller. I invited her to the upstairs dining room while directing Jose, her son, to the tech room. For the remainder of the study I designed the environment to allow for a more “sheltered” research approach. I wanted to know about the boys’ families through their own voices and experiences, but I did not want those families present, or speaking *for* the boys in our regular meetings. My best attempt to explain this in research terms is that I was trying to limit the number of variables in the tech room itself. If a parent was present, even if a parent felt comfortable enough to walk into the room without knocking - and the boys were aware of this possibility - they might begin to act and interact in a more regulated and less authentic manner. The only occasion in which all the parents were invited to spend time in the tech room was during our first meeting when I hosted a pizza party for the boys and their families.

Pizza Party

The morning of our pizza party, the first time the boys and their parents would visit the community center, I stopped for take-out pizzas, lemonade, and seltzer water, bringing along an ice chest and a sleeve of disposable cups. When I arrived at noon, two minivans were in the parking lot with two of the boys and their parents were waiting for me. Pablo’s dad was heavysset with an easy smile and wore a black polo shirt with a red insignia, like a work shirt. He seemed eager to leave and spoke to me in Spanish, but I encouraged him to spend five minutes checking out the inside of the place, and he hesitantly joined us. The two boys were quick to help me inside

with the boxes of pizza and the ice chest. The parents commented that they were impressed with the iMac computers in the tech room.

I gave the parents a tour of the building, the tech room on the first floor; the dining room, kitchen and gymnasium upstairs. Alex's mom is Italian-American and from Marshall, his dad is from Mexico, and I switched between speaking English to Alex's mom and Spanish to Alex's and Pablo's fathers, at times she looked at me quizzically when I spoke Spanish. I opened the door to the gym where two portable basketball hoops were set up, and while the parents were looking around Pablo and his dad started shooting baskets with the blue '76ers basketball Pablo had brought with him. I pointed out the old window high up in the rear wall that had been used for a film projector and opposite, a stage, both vestiges of a time when the present-day Latino community oriented center had been an Italian social club. We walked up to the third floor of the community center, which at one time was a residence of some sort, but had been in disrepair for many years and now used only for storage. Alex's father was quick to mention his experience with drywall and that he would be willing to volunteer to help repair the walls and paint them. It was a generous and unsolicited offer, and an example of a fund of knowledge, or form of expertise as capital that he was willing to contribute to the community center.

We walked back to the dining room and everyone to helped themselves to some pizza. While other parents were arriving, I explained a little bit about the study, and my preference for modeling respectful behavior or what is referred to in Spanish as *bien-educado*, perhaps best translated as well-mannered, rather than insisting on a traditional authority figure role. We sat together and talked for about 30 minutes while eating pizza. Alex's mother explained that she was born and raised in Marshall and had actually gone to high school with Mr. H., the counselor at Central Marshall M.S. Alex's father told me he was from Puebla but arrived in the United

States when he nineteen. Alex's mom asked me directly, "So your parents are from Mexico?" I told her yes, my mom emigrated from Chihuahua when she was 11, and my dad and his family grew up on the border, but were originally from Durango. I mentioned that I had formerly been a classroom teacher but had been really turned off by all of the standardized testing, Alex's mom nodded her head in agreement.

After we finished eating I recommended to the boys that we move down to the tech room to get started. The parents took this as a sign to leave, and they excused themselves, noting they would be back around 2pm. Pablo appeared adept with the technology, saying his cousin had a computer like this, he knew how to turn it on and open various programs, meaning he has been exposed to it beyond the school setting. I had them open the *Applications* window in the *Finder* to take a look at what programs they had available to them.

Participant Selection

Before offering ethnographic portraits (Lawrence-Lightfoot, 2008) of the boys, I will summarize the selection process here. After a year (2012-2013) of weekly visits to the central Marshall middle school, five of the boys had assented to working with me, and I procured their parents' consent. Additionally, the CEC's director's assistant had suggested another participant who regularly attended the after-school homework help sessions for assistance with math. The family of one of the original five boys had taken in a disabled middle-aged woman and her son whom they knew through their church. Her son was the same age as the rest of the boys and asked to join our group. A last addition was a boy also known through one of the original five - though he attended only a few meetings and after suffering an episode of domestic abuse and ceased participating. Thus, I began the formal IRB-approved study in late May of 2013 with 8 participants, and concluded in August of 2014 with 6 participants.

It is important to note that all of these boys, by participating, voluntarily self-direct as learners. In other words, out of the marginalized population I'm working with, though they may not be institutionally categorized as high-achieving, they are distinct from the boys who were invited to participate, but declined. They voluntarily show up on Saturdays to do computer work. One possible critique of this project is that I engaged students who would have pursued other self-directed learning opportunities, even if I had not designed this one.

Ethnographic Portraits

What follows are short ethnographic portraits of the participants in the study. I employ Sarah Lawrence-Lightfoot's methodology here to, "(re)present the research participant through the subjective, empathetic, and critical lens of the researcher" (2008, p. 10). The portraits are by no means exhaustive, but are meant to orient the reader to the unique strengths demonstrated and challenges faced by the boys as Latino middle school students, and family and community members in Marshall. As narratives, they are informed directly from the ethnographic data, each based on the stories they told and the experiences in the group.

Alex's Story

I met Alex when he was in seventh grade and we worked together in the tech room throughout his eighth-grade year. He has a naturally positive disposition. One of his first memorable utterances was amidst a wave of negative peer pressure in the cafeteria, Alex remained resolute and upbeat, stating, "Well, I guess I'm going to join (the group) because I want to learn about computers." He is lanky and taller than most of the boys in his grade, a fan of the local amusement park, on more than one occasion he tries to talk me into organizing a field trip there. He is the participant that introduces me to *e-sports*, though I didn't fully grasp the concept of spectator gaming at the time.

Alex lives with his family in a rowhome in a dense central neighborhood of Marshall, in the house next door to his grandparents where his mother was raised. His mother is Italian-American, and his father is from Mexico. With the exception of his father, his family identifies as white. When I try and speak Spanish with Alex, he just replies plainly that he doesn't speak or understand Spanish, though he wishes he did, "I never learned, my Dad never really taught me because he was always working." During one of our first meetings in the tech room he logs onto a website with a username that he describes to me as a combination of the racially-charged words "cracker" and "taco". "My cousins, some of 'em call me a cracker, some of 'em call me a taco..." He's unfazed by the racialized nature of the teasing. But he's also very sensitive and aware of the realities around him.

Alex identifies as mixed-race, but his father is the only member of his family from Mexico that still resides in Marshall. He used to share a room with his father's younger brother, but that uncle returned to Mexico on the occasion of Alex's paternal grandmother's death and never returned. "... me and him could share a room, 'cause we were close, and um, once he moved out like, um, really took a toll (on me), I took his leaving really hard," Alex tells me. One day he logs onto Facebook to show me the profile page of his 19-year-old cousin who recently passed away from complications of asthma-related issues. Alex scrolls through her pictures on Facebook, pointing out different relatives and telling me how he's related to them. He shows me pictures of, "when they had her ceremony for her dea- for her death..." It was a moment of vulnerability on the part of Alex. The community center tech room, with social media access and unstructured time, allowed him to access images and memory to tell me a very intimate story about some of his family whom I had met the weekend prior. He used his digital literacy skills practiced outside of school to strengthen our relationship.

Alex missed a handful of our tech room meetings late that first summer, we communicated via email during that time and he told me he missed the meetings to help his grandfather work. Other times Alex arrived at our noon meetings visibly sluggish, having stayed up late and risen early to spend the morning hours working. Pop-pop has bad knees and a bad back, Alex tells me, so he helps him with informal manual labor tasks, “He usually does everything, he does stuff like plumbing, electrical, construction, all that.” I understand this as a funds of knowledge practice and encourage Alex to learn all he can from his grandfather, though I harbor a concern that by prioritizing manual labor practices over digital literacy practices I may be observing a form of social reproduction unfold.

Pablo’s Story

Pablo is an athlete and a scholar. When I first asked the Central Marshall Middle School teachers about possible participants for the study, one teacher responded with his name as a “must have, awesome”. He is broad shouldered and quiet mannered and as such is held in respectful regard by his peers. Seldom, if ever, did I witness him being teased or bullied. He was sought out by the campus coaches, who were interested in having him play soccer or football for them. He and I often socialized about football, talking about highlights from recent or memorable games. At the same time, when he expressed interest in playing, I warned him about head trauma and research on concussions and chronic traumatic encephalopathy (CTE). During one of our final ice cream meetings toward the end of his seventh-grade year, he arrived with a folder in hand and was eager to show me the 7 Certificates of Academic Achievement he had earned. When I described the dissertation project to them as a “300 page report I had to write,” his first question was, “what happens to us (the participants) once you finish writing it?”

His family is originally from Tamaulipas, Mexico and identify as evangelical Christians, with church attendance on Sundays, Mondays, Wednesdays, and Fridays, prioritized over extra-

curricular activities. On the couple of occasions that we met as a group to go bowling at the end of our first summer and again near their winters school break, Pablo missed those events because he was helping with a *campaña*, or fundraising campaign, at his church. An alternate date didn't work because he was to help his mom set up for his sister's baby shower. He took these responsibilities seriously, telling me once that when his dad isn't there, he's the man of the house, but he still has to listen to his mom.

Pablo came into the tech room with some exposure to digital literacy practices. He mentioned that his cousin had an Apple computer and that cousin had helped Pablo 'jailbreak' his iPod Touch, allowing him to add applications not sanctioned by Apple. Pablo used his iPod Touch as his mobile device. He was one of the only participants who already had an email address before joining the study. I would email him reminders of our meetings and he responded via his iPod. However, there were instances when he didn't have a reliable wireless internet connection at home and wasn't able to receive those messages, effectively isolating him from the group for that week or two.

Like Alex, it was normal for Pablo to engage in family-related informal manual labor practices. Pablo's brother-in-law would often take Pablo out to work with him, sometimes laying cement, other times cleaning up home or office construction sites, once telling me "those apartments... are for the college people," in reference to under-construction housing units he spent the morning cleaning. When the winter storms leave several inches of snow on the ground, he drives into Philadelphia with his brother-in-law in the pre-dawn hours and they spend the morning soliciting their snow-shoveling services. When I ask how much Pablo is being paid for this work, he usually responds that he didn't ask, other times he tells me five to ten dollars per day. There are times he arrives for our meetings exhausted and unable to muster his usual

enthusiasm and focus for the activity he enjoys most in the tech room, coding. Pablo is the first to pick up HTML coding and completed the entire course on Code Academy.

Francisco's Story

I met Francisco shortly after moving to Marshall. He began attending the community center's after-school homework help sessions in October of 2012. When speaking with the community center administrative assistant, I learned that his parents had brought him in because he had failing grades in math and English. It was the summer before his seventh-grade year when we began the study. He first impressed me with his encyclopedic knowledge of Godzilla movies and characters (often able to cite films by year and the different iterations of the characters from memory). His interests also include action figures, mostly professional wrestling and Godzilla-related, he tells me he hopes to collect figures. He has a genuine affect and is highly empathetic, such that when he asks you how you have been, you feel that he is inquiring in earnest. He is charming when he arrives one day and tells me, "I wanted to come, because I wanna keep you company." Equally, he is socially guarded and painstakingly slow allow people into his confidence. He takes months to learn the names of the other boys in our group, instead referring to "him", "that guy", or, "your friend". He easily disengages from group conversations and shows discomfort in collaborating, once uttering in a hushed tone, "I don't trust youuuuuu...", while working with Alex and me.

In one conversation with the community center director, he told me of "emotional breaks" Francisco had experienced during the after-school hours. He described an episode when one of the college student volunteers had been helping another student and Francisco became visibly and audibly upset. Later, wiping away tears while sitting on the front steps, Francisco explained to the director that his parents are usually working at their restaurant, and he had come to rely on the community center as one of his only sources of personalized attention. While

Francisco exhibits a level of proficiency with the computers due to his prior experience in the tech room, he also has the ability to feign helplessness in order to solicit more individualized attention and also to get others to do work for him. It's a very subtle and highly-evolved interpersonal skill.

Linguistically, I find Francisco's utterances very interesting. He tells me that he speaks Spanish at home with his mother, father, and brother. His parents operate a restaurant a block away from their apartment, and when not in school Francisco is often shuttered in at home. He sometimes demonstrated a Spanish language syntax in his English language utterances. Saying, for example "they cost really expensive". However, to say "*cuestan mucho*" in Spanish is normal. Some of Francisco's other English language utterances were repeated directly from YouTube videos he watched for entertainment in the tech room. Those examples as literacy practices are described later in this study. Even though he explored a variety of computer programs, he didn't take up coding, filmmaking, or drafting practices. He most enjoyed art. He would search for images online, print them out to take them home, then bring back drawings. He did take up Adobe Illustrator and developed an emergent expertise in digital art.

Dante's Story

Dante is our resident autodidact and polymath. Skinny with a skater vibe. Over the course of our time together his story will break my heart, reaffirm my belief in the strength of humanity, and will make me question the boundary between resilience and desensitization. Pablo introduced me to Dante shortly before the study began as Dante and his mom were living with Pablo's family. A single mother in her fifties who had made her living as a housecleaner, she had recently suffered a debilitating injury, which left her unable to work, and left her and Dante effectively homeless. Pablo's family had met them through the church and taken them in. In the 15 months we work together Dante and his mother will be itinerant, moving three times to four shared

apartments. As we get to know each other he tells me of various traumatic incidents. His mother, recovering from ankle/foot surgery, sitting in a recliner on the first floor of their rowhome in the early morning and having two men enter the house, they were unknown to her and appeared drugged. When Dante woke, she was crying in the chair and afraid that the men would return. He has two brothers a decade older, one is perennially incarcerated and the other lives out of town. In the context of a conversation about a young man was shot down the block from where he lives, Dante tells me he has a cousin that was shot and he thinks he'll get shot at some point in his life. With little to no parental supervision, I sometimes see Dante out on the streets of Marshall when I wouldn't expect to. One day I exit a train and see him at the transportation center waiting alone for the bus to the mall. It's rare to see someone his age alone in town.

He becomes a regular at the community center, attending our group tech room meetings as well as the after-school homework help hours. It will serve as a refuge of sorts. Dante picks up coding immediately, becoming competitive with Pablo about the completion of HTML lessons. But he is always seeking out new forms of knowledge. He begins exploring other computer languages almost simultaneously: CSS, PHP, Ruby, Python, Parse. He arrives one day in the middle of his eighth-grade year and expresses his interest in learning calculus. Without any assistance he self-directs himself to the Khan Academy website and takes up math lessons for a month only to complain, "the hardest thing on there is pre-algebra". He has an intense interest in role-playing video games of the hero's journey narrative variety and insists on bringing his Nintendo Wii gaming console to the tech room to give us a demonstration. He lists at length the details of several dozen, if not hundreds, of Pokemon characters having committed them to memory from the Bulbepedia website. He scores well on the state-standardized tests with ease and has above-average grades despite him telling me he grows bored with the coursework. He wins movie tickets for being awarded Student of the Month. I am constantly amazed at the

information he is able to acquire and process into forms of knowledge. His uptake is impressive. The only flaw may be his lack of discernment - he acquires information he learns on pseudoscience television shows about alien-human interbreeding with the same fidelity as his self-directed math lessons.

The Saturday after Thanksgiving while the other boys talk about the turkeys prepared in their homes and the leftovers they will enjoy after our session ends, Dante joins the conversation by asking, "Who wants to know what I had for breakfast?" When no one responds, Dante says, "I had gum." Years after this I talk to him on the phone about college preparation and with a longing in his voice he recalls the hoagies and sodas we would order during our meetings. Twice in the winter he walks the mile from his apartment in below-freezing weather clad in only a t-shirt and jeans, arriving wet with snow. He tells me he has a hoodie, but didn't want to get it wet. I tell him I'm upset that he would walk outside like that, because it's the only way I can think to communicate that I care about his well-being. I text my partner, Jennie, to ask if she can buy a winter coat and bring it at the end of our meeting.

Dante's life circumstances have honed his instinct when relating to people. He demonstrates the ability to size-up people immediately, determining who might be a threat, either physically or intellectually. He knows how to emotionally and psychologically defend himself. In our final interview, Dante tells me about his father who lives in Mexico and has another family and mockingly states that they must be, "so beautiful and wonderful," because he never bothered coming back to the United States. He's never contacted Dante, and Dante expresses no desire to contact him. When I ask Dante if he's angry with his father, he looks up steely-eyed and deadpans, "How can you be angry with someone you've never met?" In the years since formal data collection has concluded, I occasionally exchange emails and text messages with Dante and

learn he's taught himself to play the guitar, he takes honors high school classes, and is still as bright and engaging as our time together in the tech room.

Leo's Story

Leo is our class clown. He laughs contagiously and often. He was also recommended as a potential participant by the Central Marshall Middle School teachers who described him as a highly intelligent student, but at times unfocused. He is the playful foil to Pablo's demure disposition. According to Pablo, "He's lazy! He sleeps in class but how is it that he has higher grades than me?" When I speak to Leo's father on the phone prior to Leo joining the study his father communicates his reservations about Leo's lack of direction. Later Leo is slightly embarrassed when I asked him why his parents didn't show up to an appointment we had made at a local taqueria so I could answer their questions about the study.

Leo uses a variation of the epithet "beaner" as a username for a website and laughs out loud when he uses it to log in, though I persuade him to create an email username based on his given name. He never engages in the digital literacy projects to the extent of the other boys, joining us during the school year after the others had spent their summer exploring different programs. Leo has a serious girlfriend his eighth-grade year that he has been dating for several months and it is normal for them to spend a lot of time at each other's homes. In our final interview, when I ask him why he wasn't more involved, he searches for an answer but only states regretfully that he wishes he would have begun attending soon. I was thrilled to learn that last year Leo graduated from high school and enrolled in the local community college.

Mateo's Story

Mateo is a soldier and a runner. He joins us late, after the initial summer, though I had met him during our cafeteria ice cream meetings the previous spring. He's an eighth grader who

enjoys the discipline and respect afforded to him by his involvement in JROTC. We have conversations about running and he takes pride in being the best miler at his school, with a personal record close to five minutes flat. He tells me his parents support his involvement in JROTC. He is perhaps the most financially literate of the group. During our meetings he talks to me about the summer jobs he's held (one of the reasons he didn't join us for the initial summer), as a busboy at a local diner where his mom waits tables, and going to construction sites to work with his father. He tells me about the money he's saved and how he's careful with expenditures for things like a phone, video games, clothes, and how much he'll need to buy a car when he turns sixteen.

His interests include anime, drawing and art. He voices his conflict between joining the military or attending college after high school, wary of trading the respect of the uniform for the possibility of student loan debt. He moves fluidly between English and Spanish, telling me he speaks Spanish at home. Over the course of the study, he takes an interest in Adobe Illustrator. Perhaps Mateo's most meaningful role is allowing Francisco, who is a year younger than Mateo and distrustful of strangers, the opportunity to teach Mateo some of the introductory aspects of Illustrator.

Luis' Story

Luis is a friend of Pablo's from church who joins our group in mid-fall before an abrupt departure in mid-spring. He demonstrates a respectful manner, at first calling me "Sir" and performing a role of good student but the tech room audio recordings catch him being much more outspoken on the couple of occasions when I step out of the room to receive a food delivery. He socializes with the others about gaming like Call of Duty Black Ops, and Pokemon characters. He's a cool presence the other pick up on when he notes his approval with phrases like, "That's hot". 3-D drafting is hot. Certain online gaming platforms are hot. He tells me he as a laptop at

home, but no internet connection.

He explores different programs without ever committing to just one. Code Academy and Sketch Up are the two he spends the most time on. When he suddenly stops attending, I'm not able to contact him or his mother with the phone number on the consent/assent forms. I ask Pablo about Luis a number of times. Finally, after several weeks pass, Pablo confides in me that he has seen Luis at church and there are domestic abuse issues with an uncle of Luis' in which the police were involved. Pablo tells me Luis was beat with a wire coat hanger. A consequence of the episode is that Luis is no longer allowed any socializing outside of church and school is how Pablo explains it to me. I never see Luis again. But I find out later by keeping in touch with Pablo that he works with Luis after high school.

Jose's Story

Jose participates in the study only for the initial summer. His family is regularly involved with the community center, and his parents had volunteered at the local elementary school to learn how to help their children with homework. Jose begins working with the group at the end of his sixth-grade year. His parents are concerned about his below average physical growth rate and have consulted specialists in the region to address the problem. One of the results of this medical issue is that he is much smaller than the other boys and could be confused with a boy of eight or nine years. To compound the issue, he is infantilized in other ways that socially isolate him. He wears Mickey Mouse shirts and talks about the *Finding Nemo* movie when the other boys his age wear name brands marketed toward adolescents and talk about horror movies.

Jose's parents are friendly and communicative and after a couple of months they let me know he will no longer attend our tech room meetings in favor of an extra-curricular science program starting at the Central Marshall Middle School campus. It's understandable that he had

difficulty socially integrating into the group of his peers and that his parents would choose an institutionally-sanctioned learning opportunity over an organizational one. For the time he attends he expresses the most interest in Scratch, an online coding/gaming interface.

Curricular Approach

Here I provide an outline for my approach to working with the boys in the CEC tech room. After the initial pizza party introductory meeting we agreed to meet on Saturdays from noon to 2p.m., and most of the boys were dropped off and picked up by their parents. In the first meeting I wanted to set the tone as different from what they may be used to in a school classroom, and that I was open to negotiation. I introduced the term, “group values” to avoid “rules”, or “guidelines”. My curricular intention is to set up an environment that does not have explicit power structures, but a more community-oriented setting - at the same time I recognized that some structure is inherent by the act of introducing the term “group values”. Also, I introduced the values of, “cooperation, respect, and responsibility”. No real dialogue occurred that first meeting, the boys quietly agreed. So, while the curricular intention this early on is community-oriented, the curricular practice, both on my part and the part of the participants, mimicked schooling practices. However, this began to change within the first few meetings.

There were three main instructional practices on my part, and they followed a sequence. The first few meetings required more explicit instruction (“Do this”) on my part. From how to create an email account to how to copy and paste text. After the first month my instruction transitioned to modeling and thinking aloud (“I’m doing this”). After the initial summer, it was much more implicit instruction, encouraging the boys toward self-direction and exploration. Once the fall of 2013 began, the boys had committed to working on a handful of programs. They used e-mail, Code Academy to learn programming languages, Adobe Illustrator for graphic design, and

SketchUp for 3-D drafting. My attempts to introduce iMovie for filmmaking and digital storytelling were not successful.

After a handful of meetings the first summer the boys learned that I was serious about being open to negotiation and they asked to increase the frequency of our meetings to twice a week. We began meeting on Wednesdays and Saturdays. At various times throughout the data collection period I would make suggestions about activities or project and the boys would also make suggestions. Some were taken up, others were not. At the mid point of the study I suggested we ‘huddle’ and check in with each other on ideas, progress, what we might change or do differently, how we might alter the meeting schedule, all in the spirit of maintaining an egalitarian environment.

This approach took some retraining on my part, given my background as a classroom teacher. There were times I grew annoyed at boys talking amongst themselves or not paying attention to what I was trying to communicate. I had to remind myself of the environment I was working to maintain – one where their conversation was as privileged as my commentary. This helped me foster a more profound understanding of learning. Sometimes what is perceived as disengagement is simply misidentified self-directed learning. I also had to learn that they boys would make their own choices regarding their learning, and sometimes a self-directed learning practice would end and that was a valid decision because of the boys’ agency.

I also attempted to develop an interactional style with the boys that would allow for more natural communication. I made a conscious effort to use a very informal register with the boys, even casually cursing – a tacit method of giving them permission to do the same to their levels of comfort. I did not want them to feel bound by institutional regulations in their verbal interactions. At one point, Pablo asks me, “You know how you curse, what do you do when you type it up?...

you take out those colorful words?” and he laughs. I tell him, “I include them, the thing is, I’m guessing when you’re talking with like, friends, like outside of school, you probably use those words right?” I ask. “We usually say the F-word when we play the Wii,” Dante says. “Cause if you’re ever really upset, and you come in and I can see you’re upset...” “To open up to you,” Pablo says. A few meetings later the boys are joking around and I hear Pablo, who comes from a conservatively religious family, cursing and laughing with the other boys. I take this as a sign that my efforts to cultivate an environment of natural, informal communication for the boys has been realized.

The other aspect of interactional style relevant to my ethnographic approach was my Spanish use and translanguaging with the boys. I intended to create a space that was safe for their own translanguaging practices (García, 2009). Translanguaging together cultivated an environment of cultural wealth, in that way it is counter to any forms of deficit-perspectives or subtractive schooling environments. Interestingly, one of the observations included in the third ethnographic account on identity formation is that while they translanguage with each other about home or family, they almost never do in reference to their digital literacy practices. Pablo is proud to talk about being from Tamaulipas. We like talking about the food we eat and how it is different in different parts of Mexico. We like talking about being “bien educado” and what it means. But the coding, the design, and the drafting all stay English.

As a critical ethnographer, I purposefully aimed for transparency in the research project whenever practical. In one of the first meetings, I connect my laptop to the 50” screen TV at the front of the room and show them the email I sent to the Penn IT Listserv soliciting advice for no-cost computer programs, software, websites accessible to seventh and eighth graders for the purposes of digital literacy learning. My researcher intention was to show them the back-end of

the research design just as a coder would show another coder the back-end code of a website they'd created.

Other attempts at transparency: I tell them that I've assigned them all pseudonyms as I write my notes and they laugh when I tell them their individual pseudonyms. A few suggest their own, like "Destroyer". When I prepare presentations for academic conferences, I show them the slides and describe how I will discuss the study to that point. I show them the American Anthropological Association annual meeting program and point to word "ethnography" and I tell them I am writing down what I am seeing and the way they interact, how they learn about stuff, and what their interests are, and I will present that information. Dante responds by telling me, "ethnography is like the study of a group of cultures or something like that?" Genuinely surprised I ask him how he knows this and he tells me, "You posted it on Facebook, you were talking about books and stuff," Dante says. I had made a post asking about recent ethnographies and Dante had seen the post and taken the time to look up (and memorize!) what ethnographies were! I flashed back to John L. Jackson (2013) describing his Black Hebrew Israelite participants commenting on his social media posts about his research with them. Indeed, there is no two-field world!

Data Collection Methods

The Institutional Review Board approved data collection took place between June 2013 and August 2014. General ethnographic methods were employed for the purposes of collecting these data. Specifically, the collection entailed participant-observation (Hammersley & Atkinson, 2007) with the students in the CEC tech room. Fieldnotes (Emerson, Fretz, and Shaw, 1995), audio-recordings of tech room interactions, and subsequent logs were produced. Field documents that were collected included email and text message correspondence between the boys and myself; and screenshots of the boys' products and progress. Additionally, periodic semi-structured interviews were conducted with the boys individually at the beginning, midpoint and end of the

data collection period. Topics covered in these interviews were related to their self-assessed learning progress, connections to their formal educational experiences, learning practices in the home, and language use across home, school and community contexts.

The participant-observation in the CEC tech room focused on the students' social interactions with each other, with myself, and with the media they encountered. During the process of acquiring technologically-related knowledge and skills and digital media literacy students were audio recorded in order that any pertinent dialogic exchanges could be cross-referenced with fieldnotes for the purpose of informing discourse analysis. For the purposes of employing a critical ethnographic set of data, I kept a personal journal and iterative memos were written as reflexive data based on the journal entries to assess how my positionality developed over the course of the study.

The strengths of this research design reside in the inter-contextual approach to the boys' learning. By collecting data on students' social interactions at the CEC tech room, I was exposed to different ways the students made sense of and placed importance on their self-directed learning, and how in turn they come to develop a sense of self by working in a digital literacy community of practice. By focusing on social interactions and how they shape orientations toward educational attainment, I was able to parse discourse occurring over time and how they discussed learning in the home and school compared to learning in a third space, for the purpose of gauging their development. I also lived in Marshall for three years, beginning prior to and ending after the data collection period. This allowed for more constant contact with the boys' community and a more intimate understanding of the challenges their surrounding built environment created related to extracurricular learning activities.

Additionally, as a bilingual Chicano, I established a rapport with the participants that lends itself to a more collegial relationship. When speaking with them, I was able to code-switch, change registers and move between offering advice and listening to their amusing and sometimes silly stories in a way that enhances the research relationship. Although I cannot fully understand the difficulties they incur in the community, especially growing up in socio-economically depressed and sometimes criminally dangerous neighborhoods, I have experienced some of the same discrimination and prejudice they face as Latino boys. This is related to Delgado-Bernal's (1998) concept of cultural intuition, a Chicana Feminist epistemology that states,

Chicana researchers have unique viewpoints (and) a personal quality... based on the attribute of having the ability to give meaning to data... This epistemology gives license to both Chicana and Chicano education scholars to uncover and reclaim their own subjugated knowledge, and move beyond traditional areas of research situated in existing paradigms that overlook the particular educational experiences of Chicanas or Chicanos" (p. 15).

She uses the categories of personal experience, existing literature, professional experience, and the analytical research process to justify the concept of cultural intuition. Applied to the present study, it infers that I have a shared sense of "collective experiences and a collective space" (Villenas, 1996, p. 722) with the boys that helped me make sense of the data I collected based on our interactions.

Some of the weaknesses of the research design have to do with the ways a middle-class researcher works with working-class participants and the disconnect that can occur as a result. This is complicated further in that while I have frequent interactions with the boys, I wasn't able to directly observe their learning practices in the home or with family members during informal labor practices. With limited interaction with the parents I was not able to directly inquire about the cultural values they instilled in their children, and instead relied on the parent-child interactions the boys reported. Lastly, audio recordings of tech room interactions, with as many as nine people in the room, proved very difficult to transcribe. Sometimes multiple conversations

occurred simultaneously, which required multiple passes during transcription. At the same time, video recording (along with audio) would have resulted in the same difficulty.

Data Analysis and Interpretation

My aim over the course of data collection was to create a data set that would allow me to provide “thick description” (Geertz, 1973) of the social interactions I observed, and through subsequent analysis sharpen the ethnographic lens to focus on subcontexts and interactions that yield meaning. In this way the data collection and data analysis inform and were informed by each other (Hammersley & Atkinson, 2007). My IRB-sanctioned data collection concluded in August 2014. For the next 20 months, from approximately September 2014 to May 2016, I used *InqScribe* to personally transcribe 55 hours of CEC tech room audio recordings and 8 hours of entry, midpoint, and exit interviews. These recordings produced 760 pages of transcription. Additionally, I had written 140 pages of fieldnotes and personal notes during the study.

The first level of analysis occurred by reading fieldnotes, personal journal entries, tech room audio-recording logs, and initial interview transcripts. Next I open coded of fieldnotes and initial memos, then later focused coding, and integrative memos in order to “‘discover’ original theories in (the) data” (Emerson, Fretz, & Shaw, 1995, p. 143). Through the emergent nature of ethnography I open coded the fieldnotes with the purpose of “distinguish(ing), and identify(ing) the conceptual import and significance of particular observations” (Ibid, p. 151), this informed the initial memos from which significant themes were selected. Focused coding provided an avenue for fine-grained analysis by connecting themes with data that, during open coding, may not have appeared to be related. These connections were made in integrative memos, for both the purposes of increasing my own understanding of the social phenomena recorded in the fieldnotes and with future audiences in mind (Ibid, p. 162). The validity of the analysis was strengthened by the inter-contextual nature of the research design, and the breadth and depth of the resulting fieldnotes.

Further, three rounds of coding directed the analysis to more valid ends.

As I concluded transcription the last few months of the aforementioned 20-month period, I began thematically coding the data set. Using *Atlas.ti*, data analysis of the 900 pages of the data set yielded the following: 2217 quotations, 145 codes, 37 code groups, 34 memos, and 10 memo groups. In June 2016 I began using *Scrivener* to organize and interpret the code groups into themes. I also continued the iterative process of analyzing my positionality as a critical ethnographer and the role in the context of the study. Over the next several months I drafted my evolving interpretations of the data into three cohesive ethnographic accounts.

Although this was a lengthy process, the analysis and interpretation of the ethnographic data was enriched by the levels at which I had collected data. This included preparatory sources like macro level U.S. census data on Marshall, historic research on the town, and educational statistics from Pennsylvania, to event-level data like the speech events that occurred in the CEC tech room. This allowed me to interpret the emergent analysis of the data on scalar levels (Wortham and Rhodes, 2012). This means that I was able to make deductive inferences not based solely on discourse analysis, for instance, but connected a series of speech events over time to the context of greater social phenomena. The cost of this type of analysis and interpretation is the time required for multiple rounds of coding and assembling themes.

The result of this process of ethnographic analysis and interpretation follows in the three ethnographic account chapters. They are arranged by theme. The first connects my original critical pedagogical intention to the boys via an initial critical media literacy exercise and later through the course of the dissertation project our conversations about their imagined futures and educational trajectories as they related to the boys digital literacy practices. In the second ethnographic account I use the analytic lens of situated learning to frame the boys as a community

of practice and describe the progress of the boys (and myself) as social learners in specific digital literacy practices. In the third ethnographic account, I use a linguistic anthropology approach to understanding the emergent identities of the boys and take into account their home learning practices and language use along with the social practices I observed in the CEC tech room. Before concluding, I offer an ethnographic coda wherein I aspire to hold myself accountable as a critical ethnographer, and attempt to relate the ways that I first conceived of myself as an researcher with an emancipatory intent and later better understood myself as problematically contributing to an individualistic framing of tech-based learning.

CHAPTER 4: Critical Approaches to Imagined Future and Navigating Educational Trajectories

During one of our first meetings in the school cafeteria, when I told the boys about the study I was hoping to conduct with them, I mentioned that I would write something like a 300 page report about our work together. “And what’s going to happen to us when you finish writing the 300 pages?,” was Pablo’s direct response. That pointed question let me know immediately that I was dealing with critical minds, and even before our tech room sessions began. And it pleased me because these were the kind of students I was eager to work with: thoughtful, curious, and not afraid to ask difficult questions.

In this chapter I describe how I in my work as a critical ethnographer, I engaged in dialogue with the boys about their aspirations and imagined futures as they emerged as technology experts. The purpose of these conversations was to provide the boys with opportunities to voice their aspirations, identify inequities that might create obstacles in meeting those aspirations, and connect their technology practices to their imagined futures. Additionally, I sought to share with them a form of navigational capital (Yosso, 2005) drawn from my personal experience in secondary and higher education.

Before we began our ongoing conversations about imagined futures and educational trajectories, I started by engaging them in an exercise like the one Freire describes in *Education for Critical Consciousness* (1973). The point of this exercise, which Freire refers to as culture circles, was to introduce the boys to the practice of decoding and deconstructing their experiences. Specifically, we engaged in a critical media literacy exercise¹³ while viewing the film, *The Hunger Games*. My hope was that by collectively deconstructing the social inequities in

¹³ Culture circles are similar to the critical media literacy exercise in that the boys chose the topic and engaged in dialogue in order to clarify their understanding of the content.

the film the boys would be able to reflect in similar ways on inequities encountered in their life experiences, an ability I believed would be valuable to them as they navigated their own individual educational trajectories.

In my work with the boys, I also aimed to explore the following research questions. In a community of practice facilitated by a critical Xicanx ethnographer, how do the boys as emergent technology experts formulate narratives about educational trajectories and imagined futures relative to their technical and social practice skills development and their current lived experience? How, in turn, might a critical Xicanx ethnographer take on the role of a Freirian coordinator in nurturing the boy's learning as a form of praxis?

The analysis that follows in this chapter focuses on what I learned in exploring these two questions. I begin with a discussion of a critical theory and how I approached my work with the boys as a form of critical pedagogy. I take to heart Willis and Trondman's statement that 'critical' is, "the importance of exploring unequal social power" (2000, pp. 9-10). This informs the stance I took in this ethnographic study. Critical theory is an antecedent to critical pedagogy, and I consider how they are connected, not through a historical genealogy of critical theory, but by focusing more particularly on my deployment of critical pedagogy in this project.

Thus, in the critical media literacy exercise that I coordinate with the boys, their learning how to perceive and interrogate extant power structures is central to critical pedagogy. In the process of creating a curriculum for this exercise I employed the work of Gunther Kress on multimodality (1997, 2000, 2011), and New Literacy Studies (Street, 1997, 2003, 2005) so that the conversations I coordinated among the boys functioned as a meaning making dialogue that develops a language of description and applies it to the social power relations we observed in *The Hunger Games*. I provide a description of our filmic deconstruction sessions, as well as an

analysis of how the boys developed as critical viewers and began to connect their observations to their own lived experiences.

This critical media literacy exercise was performed at the beginning of the dissertation project and provided a jumping off point for the boys' creative self-directed tech practices. However, I continued to coordinate conversations with them during the remaining sessions, often while they worked. These were unstructured, often impromptu conversations based on questions or statements the boys made about their lives at school or home. The central themes that emerged were that the boys were concerned but unsure about their long term imagined futures and how to arrive at those futures via the formal education options available to them. At times, these conversations allowed the boys to practice the meaning making dialogue they had initiated during the critical media literacy sessions. Other times, I shifted from being less of a coordinator of dialogue and more of what Enrique Murillo (1999) terms a *coyote*, a sort of smuggler shepherding the boys' across educational borderlands by providing navigational capital in the form of explicit explanations of formal education structures and my own experiences in secondary and higher education spaces. Although I will explore what being a coyote means in this context more fully in the coda following the ethnographic accounts.

The boys possessed forms of aspirational capital (Yosso 2005), that is, they articulated their hopes and dreams but were initially unsure about specific long-term goals. I attempted to frame our conversations around the idea of 'becoming'. And as the dissertation project progressed, the boys began to connect their developing tech practices more directly to their imagined futures. The primary themes that emerged from these conversations were college and the military. Previous research with Latino middle school boys has found similar aspirations (Martinez & Castellanos 2018; Martinez & Huerta 2018). These themes also provided a segue as

we moved from discussing longer term imagined futures, like what the boys want to become as adults, to navigating the educational trajectories between the present and their future.

As the eighth grade boys began to prepare for their transition to high school, they had questions about coursework and thoughts about the increased expectations that would be placed on them. This led to my explanations of tracking, the importance of self-advocacy in order to prepare for their goals beyond high school, and the different types of standardized testing they would be required to complete. These conversations were one way I shared navigational capital. However, I relate how my position as an institutional agent (Stanton-Salazar, 2011) was limited and that the boys received additional support from teachers and counselors within the middle school.

Other institutional agents had told the boys about the importance of attending college, and the boys had internalized this goal. But I sensed that it remained a vague idea for them. Their lack of a direct connection, via friends or family, to higher education environments supported this notion. It became important to forge such a connection through their tech room learning practices, not just related to the technical expertise they were developing, but also to the social nature of the work by discussing college costs and planning as a group. Huerta, McDonough, & Allen (2018) describe in their own research how such a developmental perspective can be useful in constructing a college-going identity for young men of color.

The boys formulated narratives about their imagined futures and educational trajectories based on their current home and school experiences, their developing aspirational and navigational capital, and the focal points of the following ethnographic accounts: their emerging technological expertise and their formation as a social group centered on learning practices. In addition, I functioned as a coordinator by introducing a final theme with which the boys were

somewhat familiar. I refer to *Metiendo Manos* – loosely translated as “putting your hands in,” to signify an act of commitment and risk-taking. It is an agentic perspective (Bandura, 2006) that recurs in the conversations near the end of the dissertation. They communicate their familiarity with a strong work ethic and together we connect it to the risks they may choose to take pursuing and completing a higher education trajectory or a military career. The boys’ ability to integrate the critical media literacy practices in their own lives and apply them to obstacles and inequities that may impede their educational progress will require that they *meten manos*, and will in part provide an answer to Pablo’s question about what will happen to them after I complete this report.

Critical Theory and Critical Pedagogy

The impetus for this dissertation project began years prior in a high school classroom in Austin, Texas. At the time I was a ninth grade English teacher for newly arrived international students, most of whom were Spanish dominant. I had just completed a Foreign Language Education Master of Arts degree, proposing in my thesis a curricular framework that utilized U.S. Latino literature¹⁴ as the content and Freirian dialogue circles as the pedagogical approach. Like many graduate students who read *Pedagogy of the Oppressed* for the first time, I was enthralled with the ideas Freire proposed, principally, that through praxis, or the dual engagement with action and reflection, students (or participants, to use Freirian vernacular) could bring about transformation that could create more just conditions in their daily lives.

I have a clear recollection of reading short vignettes from Sandra Cisneros’ *The House on Mango Street* with that group of high school students. They eagerly read the passages and spoke

¹⁴ Although I didn’t know it at the time, my approach was aspiring to what Ladson-Billings (1995, 2014) calls culturally relevant pedagogy, and similar to what Paris (2012) calls culturally sustaining pedagogy that, “seeks to perpetuate and foster—to sustain—linguistic, literate, and cultural pluralism as part of the democratic project of schooling” (p. 93).

with each other about their own experiences, comparing the social inequities present among the characters and settings in the book to people and places in their own lives. I was watching them begin to connect the word to the world.

As I formulated the dissertation project, the process of those former students becoming conscious of social inequity through reading and dialogue remained with me. I understood Freire addressed the pedagogical from an emancipatory position. But to fully articulate and integrate his ideas requires a theoretical grounding in the authors that he drew upon. In this section I will provide the necessary theoretical context relevant to the critical approach I sought to incorporate, and describe the theoretical underpinning of the critical pedagogical approach.

Critical Theory

The origins of critical theory are often traced back to the Frankfurt School and, later, to the work of Habermas. For my purposes here, I draw upon Raymond Geuss' adaptation of critical theory in his text, *Idea of a Critical Theory* (1981). In it, he describes critical theory as emancipatory and potentially instructive for human action. He contrasts it with positivistic scientific theory, emphasizing how critical theory is often inherently reflexive – that is, critical theorists tend to acknowledge their positionality, they are self-conscious and self-critical. Further, “Critical theory... seeks to explain why social agents accept or consent to systems of collective representations that do not serve their objective interests but legitimate the existing power structure...” (Macey, D., 2000, p. 75). Therefore, when discussing critical theory in the context of this study, I am chiefly concerned with how aspects of critical theory have been applied in the development of critical pedagogy.

Critical Pedagogy

The purpose of critical pedagogy is to allow for the full participation of individuals in society (Schaul, R., in Freire, P., 1970, p. 9). For this reason, I found it useful both as a conceptual framework and a pedagogical approach. In discussions with local schoolteachers and administrators, it was understood that beginning in the early 2000s the school system in Marshall was generally unprepared for the rapidly growing Mexican-origin student population. This meant the school district was reactively implementing bilingual and ESL programs with few experienced teachers specializing in these areas. By the time I began working with educators in Marshall around 2008, the system had greatly improved at the lower grade levels, but middle and high school students were often underserved, especially when their English language proficiency failed to meet certain standards (Allard, 2013). My position was that participation in a critical pedagogical project in a community center, unlike the schools, could be a first step into the students' full participation in society, by engaging in activities centered around their interests.

Thus, my aim here is to highlight the relevant concepts of critical pedagogy, beginning with *conscientização* and *praxis*. Freire defines *conscientização* as, “learning to perceive social, political, and economic contradictions, and to take action against the oppressive elements of reality” (1970, p. 19). He also uses the term *praxis* to refer to the two dimensional practice of action and reflection (1970, p. 75), analogous to the perception and action of *conscientização*. *Conscientização* and *praxis* are the concepts that undergird Freire's pedagogical approach. However, the definition above presents two questions, how does one ‘learn to perceive’, and what is Freire's pedagogical approach regarding taking action?

Freire answers these questions succinctly. “The correct method lies in dialogue” (1970, p. 54). He puts this statement forward specifically to counter pedagogy that simply seeks to transfer knowledge, or a “banking” concept of education (1970, p. 58). He reminds his readers of the

Hegelian dialectic that plays out in classrooms, with teachers as masters and students as slaves, “which mirror oppressive society as a whole” (1970, p. 59). Rather than a simple transfer of knowledge, a dialogic approach to education calls oppressive relations in society into question in order to allow for full participation by all individuals. Thus, conscientização and praxis are the concepts, and dialogue the method, upon which reflection and action as processes of learning are based.

However, this notion that society’s ills can be corrected through dialogue seems to create more questions, especially in the context of this study. How could dialogue allow the boys to “take action against the oppressive elements of reality”? What were those oppressive elements? And, what did “taking action” entail? As an ethnographer and short-term resident of Marshall, I can provide examples of oppressive acts that I witnessed in their school and community settings. The carceral nature of their school environment, the lack of technological resources that existed in neighboring (wealthier) school districts, the racial micro- and systemic aggressions I witnessed and occasionally experienced were just a few. During our time together, the boys would describe many more examples. Yet how could these discriminatory and oppressive acts and requisite action in response be conceptualized in terms of critical pedagogy?

Freire answers these questions by citing the work of Vieira-Pinto (1960) and his concepts of limit *situations* and *limit acts*. As individuals reflect on the oppressive elements of their reality, they become conscious of their ability to act in order to transform that reality, they become conscious of their limit-situation. “As they separate themselves from the world, which they objectify, as they separate themselves from their own activity, as they locate the seat of their decisions in themselves and in their relations with the world and others, men overcome the situations which limit them: the ‘limit-situations’” (Freire, 1970, p. 89). This awareness is the first

step in conscientização, or praxis. The response that individuals choose to enact to a limit-situation is what, “Vieira-Pinto calls ‘limit-acts’: those directed at negating and overcoming, rather than passively accepting, the ‘given’” (Freire, 1970, p. 89).

Freire reframes the work of Vieira-Pinto (1960), calling limit-situations *themes* and limit-acts *tasks*. When an individual is able to identify the theme in their reality that has limited them, and is able to recognize the task necessary to overcome that limit, they have arrived at what Freire terms an *untested feasibility* (1970, p. 105). At this point the individual makes a decision to either accept the status quo and refuse the task to overcome the limit-situation, or they can enact a *testing action* (1970, p. 106), and attempt to overcome said limit. Should the testing action prove successful, the individual disrupts the status quo, allowing a fuller and more just participation in society.

Here it is my contention that conscientização is not a linear and unidirectional process, but an iterative one. The individual may choose to reflect but not recognize any limitation, or they may recognize a limitation and choose not to act for reasons known only to the individual. However, it would be cynical to suggest that one instance misrecognition or inaction on the part of the individual is a summative refusal of their own emancipation. Popova (2015) reminds us that, “Critical thinking without hope is cynicism. Hope without critical thinking is naïveté.” Therefore when an individual comes to an untested feasibility and turns away, a hopeful, critical stance dictates that one can always return to attempt a testing action. This is how I understand conscientização to be an iterative process.

To this point I have described conscientização as a concept, and dialogue as a method, that together form a process of communication that allows individuals to identify oppressive limit-situations in their lives, recognize an untested feasibility and engage in limit-acts, in order to

enact a testing action. However, the pedagogical concepts Freire describes require situating within this framework. The steps for a critical pedagogical process are as follows:

1. “Get a significant number of people to agree on an informal meeting at which they can talk about their objectives” (1970, p. 102). During this meeting researchers observe and take field notes.
2. The investigative team holds evaluation meetings (possibly with local assistants as representatives) and begins to formulate program content based on observed contradictions – i.e. the team prepare codes/themes that emerged based on the community members’ stated objectives.
3. The team then initiates decoding dialogues within “thematic investigation circles” (1970. p. 110). (Described below)
4. The investigative team lastly transcribes and analyzes dialogue. In sum, participant/observation and fieldnotes, meeting to evaluate observations, decoding in thematic investigation circles, analysis and re-coding.

Freire in *Education for Critical Consciousness* (1973) and *Pedagogy of the Oppressed* (1970) breaks down step three of the pedagogical practice into three parts: dialogue, program content, (de)codification (1973, p. 45). Dialogue consists of an egalitarian approach to instruction. Rather than imposing a teacher-student model associated with the Hegelian dialectic, Freire proposes a “culture circle” (1973, p. 42) with a coordinator and participants. The second component, program content, is based on the lives of the participants. “The starting point for organizing the program content of education or political action must be the present, existential, concrete situation, reflecting the aspirations of the people” (Freire, 1970, p. 85). This is important as it resonates with concepts in more recent educational research like culturally responsive/relevant/sustaining pedagogies (Ladson-Billings 1995, 2014; Paris 2012; Paris &

Alim, 2017) that promote the idea of beginning instructional practices by incorporating the knowledge and practices the students possess. Freire then alludes to how this content is addressed via dialogue, “utilizing certain basic contradictions, we must pose this existential concrete, present situation to the people as a problem which challenges them and requires a response...” (1970, p. 85).

The (de)codification practice occurs in the posing of said situation as a problem. “During the decoding process, the co-ordinator must not only listen to the individuals but challenge them, posing as problems both the codified existential situation and their own answers” (1970, p. 110). Based on the previous observations (Step 1) the researchers choose participant generated situations to problematize. This dialogic thematic investigation within the culture circle is cornerstone of critical pedagogy. Freire notes that while the participants generate the themes and break down their constituent parts with each other and the coordinator, the coordinator may choose to introduce *hinged themes*, or themes not previously suggested. In doing so, “they may either facilitate the connection between two themes in the program unit, filling a possible gap between the two; or they may illustrate relations between the general program content and the view of the world held by the people” (1970, p. 114). This decoding is form of critique, that allows the individual to practice active analysis, rather than passive consumption of the individuals’ lived experiences. Later Freire suggests that with care to avoid banking education models of instruction, the thematic investigation practices can be applied to various forms of text.

The final concept I will discuss in this section is that of coordinator. I will explain how I understood the position relative to the context of the dissertation project. My purpose is to connect the processes of conscientização via thematic investigation circles to how I attempted transparency and reflexivity as a critical ethnographer acting in the role of Freirian coordinator.

Ethnographer as Coordinator

In the context of this dissertation project, many terms could be interchangeably applied to refer to the roles I fulfilled. At times researcher/investigator, other times I seemed to revert to my K-12 pedagogical training and play the role of teacher, even mentor. This is in addition to the term *teacher-student*, that Freire uses to avoid implying unidirectional authority. Throughout the dissertation project I considered myself a critical ethnographer, diligently recording fieldnotes and analytic memos about the study as a whole. But inside the tech room for a few hours a week I did my best to fill the role of coordinator.

To be a coordinator I had to be willing to answer the questions I posed to boys. If, through dialogue, I hoped they would be honest, vulnerable, and forthright, I would have to have the same expectation of myself. To expect a vulnerable participant, I would have to be what Ruth Behar calls a vulnerable observer (1996). I would also have to be reflexive so as to identify when my own behaviors and utterances slipped back into schooling-based role of authority. That reflexivity also required that I, as a Xicano ethnographer from the U.S./México Borderlands, not conflate my cultural similarities with boys from Mexican-origin families in a New Latino Diaspora setting as having identical perspectives or practices.

This approach to the role of coordinator is in keeping with critical theory rejections of positivist or purely objective stances in research. I contend that the roles of coordinator-participant and participant are intersubjective in the sense that, “intersubjectivity is more than shared or mutual understanding and is closer to the notion of the possibility of being in the place where the Other is” (Duranti, 2010, p. 17). In the setting of the tech room it is possible that, through dialogue, we could begin to occupy each other’s roles, myself as a participant, willing to listen to and learn from the boys, and the boys as active agents willing to question aspects of their own reality, and mine.

To investigate the generative theme is to investigate man's thinking about reality and man's action upon reality, which is his praxis. For precisely this reason, the methodology proposed requires that the investigators and the people (who would normally be considered objects of that investigation) should act as co-investigators (Freire, 1970, p. 97).

Here we see the participant positioned as co-investigator, and where Freire mentions the coordinator introducing hinged themes above, we understand the coordinator as participant. These are methodological connections to intersubjective anthropology and ethnographic participant/observation. However, while the ethnographer simultaneously participates and observes, as a critical ethnographer I simultaneously coordinated and participated. What I am suggesting then is that ethnography is a strong methodological approach to critical pedagogy research projects, but it requires a critical ethnographic (Villenas & Foley, 2011) stance, one with an emancipatory intent and a willingness to be transparent and reflexive.

I attempted to enact this transparency and reflexivity in three ways. First, in our discussions I attempted to be transparent by explicitly telling them what I was trying to accomplish with the research project as a whole and our specific learning practices. Second, I reflexively introduced themes from my own personal and professional challenges as models of problem solving and persistence that I thought might connect to their life situations. Again, this reflexivity required that as a coordinator and participant, I understand the privileges, limitations, and differences in my own schooling experiences. And third, I introduced examples of Latino males as role models related to learning and persistence. These will be discussed in greater detail later in this chapter.

Beginning with a description of critical theory, I have provided a context for applying a critical pedagogical approach to this project. Further, I have delineated the concepts based on critical theory that Paulo Freire used to formulate critical pedagogy. I then described how these critical pedagogical concepts fit into his pedagogical practice, and specifically this dissertation

project, before making connections to anthropological methodology. Last, I alluded to how my role as a coordinator grew out of the connection between critical pedagogy and critical ethnography. In the ensuing section, I will provide an account and analysis of a thematic investigation circle we participated in using the 2012 film *The Hunger Games*. One of the purposes of that exercises was to allow the boys practice at decoding themes in the film via dialogue. Specifically, the boys discussed the filmic evidence that provided clues about class, power, and agency. They were able to reflect on contradictions and inequities presented in the film. I propose the boys could extend this reflection into action by decoding similar themes within the evidence provided by their own lived experience in their schools, homes, and communities. This mutual reflection and action is what Freire refers to as conscientização, or praxis.

Critical Media Literacy

In the first month of the project, after the boys became accustomed to the tech room and socializing with each other, and had explored different computer programs, as noted above, I introduced a critical pedagogy exercise. The purpose of this exercise was to have them become familiar with the process of problematizing texts and later to extend that process to their own lived experiences. In the role of coordinator, I proposed we watch and discuss a film of the boys choosing. This approach arises out of Freire's (1973) directive that culture circles engage in group debates on topics offered by the groups themselves (p. 42), and that texts can serve as didactic resources in critical pedagogy exercises (1970, p. 116). While Freire's original didactic resource examples – magazine articles, newspapers, and book chapters – were traditional written text, I asked the boys to select a filmic text to problematize.

I began by asking them what type of movies they like to watch, with an explanation that I would like to have us watch a film together and discuss it. I connected the exercise to their initial digital literacy practices by describing how the storytelling that happens through the

movies they watch also occurs in some the content they may choose to create later, like webpages and graphic designs. I explained that by taking the time to watch a movie and discuss it, they would learn how the parts of the film come together to form a narrative whole, just as the lines of code they write become websites. When I asked for examples of movies that they have seen and like they named several. Harold & Kumar, Marley & Me, Underworld, Finding Nemo, The Hunger Games, Godzilla, Fast & Furious, Kung Fu Panda, and Wreck It Ralph all make the list that I write on our whiteboard. Taking into account age and content appropriateness, as well as availability, we agree on watching The Hunger Games a few scenes at time.

Curricular Approach

Earlier in this chapter, critical pedagogy was described in broad theoretical terms. Here I explain how I connect those terms to a curriculum based at the intersection of multimodality (Kress, 1997, 2000, 2011; Bezemer & Kress, 2016) and New Literacy Studies (Street 1997, 2003, 2005) in order to provide a space to practice a “language of description” (Kress and Street, 2006, p. vii; in Pahl & Rowsell). While Gunther Kress’ work focused on the ways in which meaning-making was multi-modal (e.g. visual, gestural, kinesthetic), and how those modes are addressed via social semiotic theory (2011), scholars developing New Literacy Studies examined how literacy was fundamentally a *social practice of representation*. Taken together, they provide a vehicle for critical pedagogical social dialogue that deconstructs visual filmic texts. This curricular approach can be understood as critical media literacy (Alvermann and Hagood, 2000). In this case, critical media literacy functions as a meaning making dialogue that develops a language of description and applies it to the social power relations the boys observe while watching The Hunger Games.

My curricular intention was to create an opportunity to deconstruct filmic text of their choice. By soliciting -emic utterances of their preferred films we began with films that already

existed in their world. When I introduced the proposed activity to the boys as, “watch(ing) a segment and talk(ing) about what happened and what did not happen”, I indexed a critical and active viewing that takes into account what explicitly occurs and what the film infers in order to understand how structures of power function. Additionally, my aim was to provide a filmic text as the basis for dialogue about how such texts correspond with the life experiences of the boys. This curricular option provides an avenue for reflection, the first element of Freirian *praxis*. With these aims in mind, we began with *The Hunger Games*, as it provides a promising youth-oriented plot about a heroine from an impoverished working-class background competing against better-trained and more affluent peers in a life-or-death state-sanctioned spectacle — one akin to contemporary reality television. I streamed scenes from the film via my laptop onto the tech room television and we watched them together.

Description of Critical Media Literacy Sessions

Over four sessions we spent the first portion of our time as we previously had, engaged in coding, graphic design, and 3-D drafting programs. Shortly after the halfway point of each session we would take a break and then begin our collective viewing and dialogue of *The Hunger Games* for the remainder of our meeting time. Upon reflection, despite my understandings of how critical pedagogy functions and the historically problematic nature of the banking model, in our first session I unwittingly reverted to the practices I was familiar with as a K-12 teacher. I prepared for the discussion by watching the segment beforehand and noting discussion points and potentially meaningful vocabulary. I created a worksheet with two vocabulary words, *treason* and *tribute*, along with reflection questions to facilitate discussion. In considering all of the activities the participants engaged in during the course of the study, this first critical media literacy session is the least self-directed in terms of its structure and its similarity to classroom exercises. In later filmic deconstruction discussions, I opted for dialogue over vocabulary definitions and worksheet

questions. This more loosely formatted approach aligns with participant-directed dialogue and therefore more egalitarian than a highly structured teacher-led exercise that has more in common with a banking approach to education.

In the first, more structured, session, I start by having the boys go to m-w.com and look up the two vocabulary words, treason and tribute, on the worksheet I created. I read the definition of treason aloud off one of their screens, “the betrayal of a trust”. We get into a conversation about what betrayal means. Dante says, “lie”. Then he reads the definition of tribute out loud, following my model, “The payment by one ruler or nation to another”. Then I mention that the second definition is probably better, “Something given or contributed voluntarily, as due or deserved”. Later in my fieldnotes I write, “I wish we would have gone back to these definitions, because there is very little that’s voluntary about the Hunger Games!” They write down the definitions on their worksheets and I cue up *The Hunger Games* on the large screen TV at the front of the room. I tell them that movies and books (narratives) are “kinda like stories that help you understand your world and your life, and stuff that’s going on.” I tell them we’ll watch the first twenty minutes one time through, and then they will complete the questions on the worksheet. I read the questions aloud before playing the film so they will have some idea of what to look for in the first scene.

After viewing the scene, we discuss the questions together. “How would you describe the place where the characters live in the beginning?,” I asked. “Poor”, Pablo says. I ask them to offer evidence for their statements. They mention the lack of food and austere accommodations. As we continue our discussion, I continue to ask them for “context clues to support their answers” as part of the close reading necessary for critical literacy practices. The first time through we watch the scene with no interruptions. We begin to watch it a second time through, pausing the

film to talk about how the movie is structured, paying attention to scene shifts and pace. I point out how when the viewer is not sure what exactly is occurring, one has to make some guesses. I compare what we are watching to 'show-and-tell' at school and how showing is always more effective than telling. I encourage them to point out all of the little things they see in the scene. We continue deconstructing closely, making guesses when we are not sure of certain things. I tell them to pay attention to music and "what kind of feeling it gives."

When we get to the last question, "How would you describe the power relations? Who has the power?", they introduced specific terms from school including, *social hierarchy* and *class* structures from a lesson about ancient Egypt. Interestingly, Pablo synthesizes the school lesson with the Hunger Games scene and then maps it on to his own experiences, stating, "We would be considered middle class, I'm pretty sure, I'm pretty sure the very low people would be the poor people, nowhere to live, I'm pretty sure, 'cause that's what they used to do in Egypt." Here he offers no distinction between middle class and working class. In Marxist terms he indexes the lumpen class as "the very low people", but he doesn't seem familiar with the idea of working class, simply middle class or poor.

In the second session watching *The Hunger Games*, I remind the boys of the work we do as programmers and coders and contrast it with our critical media literacy objective of analyzing the parts of the film to understand the whole as decoding. I tell them one activity is like Legos, putting them together to make something, with the other activity, we're decoding. So if coding is building something up, then I ask them, then what is decoding? "Destroying it", Dante answers. "Breaking it down," I clarify. I tell Dante he has a good point, to destroy something is like taking a Lego sculpture and running over it with a car. "Or using a hammer," Dante adds. I ask

rhetorically, “If they ran over it with a car then they couldn't use those Lego pieces again, huh?” “But with like decoding,” I tell them, “it's deconstruction—you're taking it apart”.

Pablo is quick to catch on to the concept of deconstruction and questions elements of certain scenes. “How did the rich districts got (sic) all that metal to build things?”, he asks. He also observes geographic isolation, noting that, “The only way to get to where the poor people live is by train, on a mountain.” He asks about the motivations and emotional dispositions of certain characters. Another boy makes more general observations about the different colors the characters wear, and Pablo builds on that insight by commenting that the materials they use for their costumes are probably from their districts. The boys are each working at their own levels as they engage in filmic analysis, but they are also engaged in dialogue together. We discuss Pablo's question about where the resources for the built environment of the wealthier districts may have come from. I ask them to list what it takes to make a train run. Steel, engine, coal. They fail to remember a brief scene from the first day we watched so I rewind to show them the miners from one of the marginalized districts, walking exhaustedly out of the mine covered in soot. I tell Pablo he made a connection between what the men in District 12 do, the train, and importantly, where the train leads.

Next we re-listen to a conversation two characters have about the different Districts. District 1 (the capital) trains their tributes in a special academy, Pablo and Dante repeat back a portion of the conversation in which one of the characters states, “they don't receive any special treatment,” In re-watching and deconstructing the conversation, they boys realize the contradiction. “They have enough money to go to the academy, and that is special treatment.” And, “For them to volunteer, don't they have to be persuaded to volunteer to that thing?” Pablo realizes the social pressure/expectation placed on District 1 participants. I tell them, “we are

doing two things, the first time is just watching it to enjoy it.” “Observation,” Dante inserts. I continue, “The second time is what’s called ‘critical analysis’, or ‘critical media literacy’”. I tell them you can do it with a lot of different subject matter. “With, *The Last Story*, for example”, mentioning Dante’s favorite narrative style video game. “Who gets special treatment? Who’s privileged? Who is in a position of power? The reason we do this is so we can take this stuff we learn by watching movies and video games, and we can make our own movies if we want, and also learn how these things work in the real world. So that when we see it in the real world, we can point to it and say, that’s special treatment... and people will ask where’s your proof, and you can be like, ‘here’s my proof’.”

In our third viewing of *The Hunger Games* I remind them about “critical analysis” and that, “we’re watching it for clues, and we’re watching it for meaning... there are parts in the movie, that correspond to parts of our lives. So the better we can understand the small things that are happening in the movie, the better we can understand the small things that are happening in our lives and how that works, basically.” I remind them that we have to have visual or audio evidence for the claims we make as the viewer. Francisco remembers the conversation about “special treatment” we had during our last viewing. As film begins, I pose a question to prime the pump and further remind them to be active viewers. I ask if they think Katniss, the main character, is used to the technology they have in the capital. They all answer no. During a flashback scene, I ask them to interpret the purpose of the flashback. Alex says, “They met before, and she was hungry looking for food.” A couple of scenes later Dante quotes back verbatim from the film, staying as close to the text as possible. “Hope,” Dante says, “A little hope is effective, too much hope is dangerous”. I ask them why a lot of hope is dangerous. “Because they may, um, get, um, too much hope, that they’ll try to take over, Take back what’s theirs,” Alex responds. Here I am asking them to make some beginning inferences, though those inferences are

scaffolded by the fact that many of the boys have already seen the film all the way through. I reach a bit further, asking the group “what is theirs?” and the boys take a few general guesses.

Analysis

In the first session, despite my missteps in modeling it after schooling practices, Pablo’s insight about class divisions in the first scene is a powerful first step in accomplishing the objectives that I set forth when envisioning a critical media literacy session. Namely, that through dialogue the boys learn to articulate the meaning behind what they are viewing and apply it to their own lived experience. I ask about power, and the boys introduce terms like social hierarchy and class that they learn in school, specifically about ancient Egypt. Then Pablo takes the step of integrating the class divisions from the film and the terms from school, and synthesizing them into his present day experience. It is also telling that in Pablo’s schema there are only, “the very low people,” and the middle class. I infer that this simplified structure allows him to believe that he has more privileges than he actually does.

In the second session, the boys begin to make connections to labor and resources via the characters and the built environment. Specifically, they discuss the geographic isolation of District Twelve, where the protagonist Katniss comes from. Then they note the built environment of District One, steel skyscrapers and a train that brings the hunger games competitors to the capital. I function as a coordinator, scaffolding their observations about the resources available in the capital to a previous scene of miners in District Twelve. The boys discuss how the infrastructure of the capital is possible due to the labor of the, “very low people,” in District Twelve. Later in this same session, they deftly critique how the wealthy participants deny their privilege of being trained in academies. The boys articulate that they have the resources (money) to pay for such training, which is special treatment. This is another way in which the boys are meeting the objectives of the critical media literacy exercise, by deconstructing scenes and using

their voice to index social inequality. In this second session I also make the effort to be reflexive and transparent with the boys as I point out that we are engaging in critical media literacy in this process, and how – just as Pablo had done earlier – it can be extended to analyze social inequities in their own daily lived experiences.

In the third session, we move further along in our analysis of the filmic text. We discussed filmmaking practices, such as the way certain groups of scenes fit together and the qualitative difference between showing and telling. We covered terms like symbolism and symbols as they pertained to names and elements of dress. I mention the differences between visual evidence, making substantiated claims based on that evidence, and making inferences based on other information provided in the film that may not be as clear, that, “we can take guesses, but we don’t know for sure, but that the point is to keep thinking about what it symbolizes. It’s a question that might be able to be answered later.” The meaning making they practiced became more nuanced as they discussed the purpose of flashback scenes. And they become more adept at staying close to the text, even repeating dialogue verbatim and discussing what is meant by the danger of having too much hope.

Our work on this filmic deconstruction exercise went on for approximately six weeks. During that time, lessons began with a classroom instruction-like format, complete with a vocabulary and question worksheet. Then the next several sessions had a more open discussion format. We continued to screen the film, pausing it or rewinding when someone had a question to ask or a point to make. The boys engaged in dialogue about power structures and identified contradictions in the filmic text. Yet, over the course of the last few sessions it became evident they were fatigued by the repetition. Nearing two months of deconstructing *The Hunger Games*, and near the end of the film itself, the boys voiced their collective preference to focus instead on

various coding, graphic design and other computer activities. Due to the primacy of self-direction in the curricular approach, I followed their suggestion and we returned to spending the majority of our sessions on their preferred activities.

Overall, this critical media literacy exercise was an important first step in developing the boys' critical digital literacy. They gained experience collectively interpreting the visual signs and sign-making in the filmic text. They practiced close reading of the visual text, making substantiated claims via explicit visual evidence within and between scenes. They made inferences when making explicit connections between the characters' dialogue and actions was difficult. And they collectively analyzed the class distinctions and social inequities present in the film's storyline, and made the critical connection to their own daily lived experiences by using terminology from a school lesson on ancient Egypt.

In the following sections, I will provide examples and discuss how this exercise primed the boys for dialogue about their digital literacy interests and practices. Specifically, the boys begin to use some of the same deconstruction and dialogue to examine their own imagined futures and begin questioning their educational trajectories. This moves the practice of critical pedagogy from a straightforward textually-based exercise to an application of the dialogic techniques to what the boys believe is possible for them to achieve, and how our community of emergent technology experts can provide a vehicle for realizing those achievements.

Imagined Futures

The critical pedagogy exercise that provided the boys with practice in critical media literacy served as a foundation for later discussions that centered their imagined futures as a subject for reflection and action. In the conceptual framework section of this chapter, I mentioned the "limit situation" (Freire, p. 89, 1970), or a situation that limits the boys' self-directed

progress, and that a “limit act” is necessary to overcome such a situation. In *The Hunger Games* film we watched, the limit-situation for the protagonist was a rigged life-or-death competition that required her to complete a series of limit-acts. For the boys, the limit-situation is a combination of factors relating to their lived experiences. Principally, that they are non-dominant youth from a marginalized socio-economic background. One possible limit-act in response to this situation is the development of their self-directed digital literacy practices. But this formulation prompts a series of questions for the boys: What exactly is being “overcome”? Beyond a current interest in “hacking”, computer programming, and the like, what are the long-term uses of the skills they are learning? How can these digital literacy practices help them reach their goals? What are those goals? These questions formed the beginning of our critical pedagogy discussions.

The dialogue occurred during our group sessions, as the boys worked on their respective programs, and also during the individual semi-structured interviews I conducted with the boys at the beginning, middle, and end of the study. One of the questions that emerged in various forms in all of those instances, was about their imagined futures and their goals. It bears mentioning that the boys spoke of their futures in scalar terms. As middle-school boys, conceiving of the future often meant trying to envision what high school would be like. Other times, I prompted them to imagine what life would be like for them in five or ten years, and the role their technology-related learning practices – extant, emergent, and imagined – might play in that longer term future.

I also contend that the dialogue we shared regarding their imagined futures served as a form of capital in itself. Specifically, what Tara Yosso refers to as aspirational capital in her Community Cultural Wealth framework:

Aspirational capital refers to the ability to maintain hopes and dreams for the future, even in the face of real and perceived barriers. This resiliency is

evidenced in those who allow themselves and their children to dream of possibilities beyond their present circumstances, often without the objective means to attain those goals. This form of cultural wealth draws on the work of Patricia Gándara (1982, 1995) and others who have shown that Chicanas/os experience the lowest educational outcomes compared to every other group in the US, but maintain consistently high aspirations for their children's future (Delgado-Gaitan, 1992, 1994; Solórzano, 1992; Auerbach, 2001). (Yosso, 2005, p. 77).

I sometimes offered examples from my own lived experience when I incurred a limit-situation, and the limit act that was necessary to move beyond it. Other times, it was more relevant to reflect on the learning processes at hand. For example, when initially designing the study, I hadn't anticipated their coding ability advancing so quickly, and I experienced moments where I was not able to solve the technical problem when one of them asked me for help. This was a limit-situation in itself, though on a far smaller scale than a life-changing event. The boys observed me, and I modeled responding to the limit-situation, with the appropriate limit-act based on my skills and abilities. This is important because my intention in those moments was to model perseverance and discuss possible limit-acts with them. There were instances when the problem was not completely solved. In those cases, I mentioned to the boys that it is the attempt that is important. The attempt itself is the form of capital I intended to impart via dialogue. And hopefully a form of capital they are able to employ in a manner related to their imagined futures.

Un/Imagined Futures

One of the digitally-mediated ways in which I prompted dialogue was to mention that I noticed how I had changed over the years by looking at my Facebook photos. When I asked them, "who do you see yourself becoming?" I am initially met with silence. "My Algebra teacher asked me what I was gonna be, um, like, when I grow up, I was like, 'I don't even know yet'," Pablo tells me. "What'd you end up telling him?" I ask. "Nothing, 'cause I didn't know what I was gonna be," Pablo responds. This was a common answer early in the study when I raised the subject. The boys hadn't yet begun to imagine, or learned to articulate, what their futures might look like. I had

originally proposed a filmmaking and digital storytelling project as a way for them to both develop their technology-related skills and express their aspirations, but after introducing them to iMovie and digital storytelling websites they expressed little interest in pursuing such a project.

Instead, our dialogue connected the filmic textual analysis techniques we used while watching *The Hunger Games* to their own lives. The boys first spent a few minutes discussing details of their current daily lived experiences. Then, I facilitated the conversation by asking them to think about what life was like five years ago, and asked them to imagine themselves five years in the future. What will they want life to be like? What can they do now to prepare? It was a proleptic thought experiment aimed at having them consider imagined futures and connecting current and past daily lived experiences to these imagined futures.

I ask Francisco what he wants to spend his life doing. He's silent. "That's a good question, huh?" I tell him. "Yes, that's a good question, I don't know," Francisco responds. I ask him if he remembers when he was 8 years old, he says yes. I explain how ages 13 to 18 will go by as fast as ages 8 to 13 did. I tell him I don't expect them to have perfect answer right now, but that thinking about these questions is also a form of deconstruction, because he gets to take the pieces of his life apart, look at them, and then put them back together, like taking those little Lego bricks of our life and taking them apart.

This is an example of dialogue where we've effectively moved from critically viewing *The Hunger Games* to discussing digital storytelling to introducing proleptic and deconstruction techniques to the boys' imagined futures.

The boys ultimately choose other activities over the filmmaking and digital storytelling, and initially their futures seem unimagined, or vague. But in discussing digital storytelling as a curricular option we are organically led to telling our own stories to each other. What emerges is the opportunity for reflection on future possibilities. Reflection that is the first part of Freirian praxis. I am asking them to consider what actions, the second part of praxis, can be taken in the present to begin to imagine their futures.

The theme of imagined futures is one that reoccurs through subsequent sessions. At one point Dante worked on a coding lesson that required him to create an ordered list in the HTML programming language and I suggested he use his “Top 5 Life Goals” as the content for the list. Number one on the list was the goal of becoming a designer of role-playing video games like his favorite, *The Last Story*. Here the medium is digital but the content is related to praxis, allowing Dante to connect his critical reflection about his imagined future to the action of his learning practices.

Emerging Imagined Futures – The Military and College

Over the course of the study, the futures the boys imagine after high school take two distinct trajectories, the military and higher education. All of the boys mention college during the mid-point and final individual interviews. However, two of the boys expressed interest in joining JROTC (Junior Reserve Officer Training Corp) in high school and using it to prepare for future military service. Matéo tells me, “I was just looking for the one that had the best military training stuff, since the high school has JROTC.” “Oh yeah, I’m gonna join that next year,” Pablo interjects and continues, “My cousin joined the military and I really don’t know when his thing is going to end, but my mom said that it’s like a pride for his mom, ‘cause her son is at the military, and ‘cause, like my grandma used to be really rough with him, but look at where he’s at now.” Alex offers, “My great-grandfather, he was in the Air Force, in World War II... So, (I want to) become like military, Army, one of those.” But when I ask him what specifically he would want to do in the military he tells me he doesn’t know, before responding, “all I wanna do, is something that I love, and that I’m good at.”

This connection between family members’ military service, JROTC, and the boys’ imagined futures is one that Gina Perez explores in *Citizen, Student, Soldier: Latina/o Youth, JROTC, and The American Dream*,

Many young people spoke admiringly about their families' choices and were clear about how they were inspired by them to join JROTC either as a family tradition, a sense of shared history, or even as a way of benefiting from what they saw as the good things the military could offer in a high school-based program... And while there was no unanimity regarding the role the U.S. military should play abroad, it was clear that family traditions, ethnic pride, and military service together play a part in shaping students understandings about JROTC (2015, p. 52).

Less clear was a family tradition or connection to higher education. The boys spoke of "college" in very general terms. They imagined their futures after high school with utterances like, "I'm going to try to go to college," "Imma go sign up for colleges," "Hopefully I'm starting college (after high school)". They boys articulate that they understand that going to college is important, or that they remember that teachers, counselors, coaches, and administrators in their school environment have told them that going to college is important. And possibly for this reason they felt compelled to pursue that trajectory but generally remain uncertain about how such a future functions beyond it being a precursor to adulthood.

It is not unusual for a middle school-aged boy to be uncertain about their life or career trajectory, and aspirations certainly shift over time. It is worth noting that for some of the boys, their time in our digital literacy community of practice helped to shape their aspirations. In our mid-point interview, I ask Alex if he has thought about what he'd like to study in college. He responds, "After- ever since I've been coming to this program, I've been thinking about more like computer design, art, Sketch Up." Here he is referring to the 3-D computer-aided drafting program he has been using to design structures. When I ask him about his design interests he tells me, "There's not like certain things I like to draw, just like, it's fun for me because I can express myself and how I would like to have like certain things, certain buildings and all." Although broad, Alex's enjoyment of designing in Sketch-Up indicates an emergent aspiration, and one that

was not present when we first began working together. He has connected this new skill to an imagined future in higher education.

When we began conversations about imagined futures and applying critical pedagogy methods to better understand how the boys' learning practices could be a way of transformative action, my purpose was to help them envision the steps (limit acts) required in order to reach those goals. However, in the course of those conversations I realized they possessed little information about higher education trajectories beyond adults telling them it was important. For this reason our conversations shifted to more focused and discrete talks about navigating educational trajectories – regardless of what their imagined futures beyond high school might contain. What follows is a thematic description of the contexts surrounding those conversations, and the necessity to address navigating higher education trajectories in order for the boys to further develop their imagined futures.

Navigating Educational Trajectories

As our discussions shifted from longer term imagined futures, like adulthood and careers – i.e., “what do you want to be when you grow up?” – to nearer imagined futures, like high school and college – i.e., “what do you have to learn to be that?”, I attempted to coordinate dialogue along the lines of navigating educational trajectories. We discussed the elements of formal education relevant to the boys' imagined futures. There are several instances of this theme in our conversations, especially as the eighth grade boys prepare to make the transition to ninth grade and the high school campus. Certain topics arose when we discussed educational trajectories. Here I apply concepts from critical pedagogy to preparation for secondary and higher education environments. Specifically, as a group we addressed issues such as tracking in high school, the importance of self-advocacy in choosing high school courses, how standardized

testing functions, college-going trajectories and practical concerns like higher education costs, and how navigating educational trajectories requires resilience.

I first met the boys when they were sixth and seventh grade students, and we began the dissertation project the summer before they entered seventh and eighth grade. Thus, we developed a relationship during the period prior to the boys transitioning to high school. And over time, our discussions led to my involvement as a mentor and counselor of sorts. Pablo tells me,

Mr. H. (his guidance counselor) called me down to his office, and I put you down as a counselor or something, 'cause I asked him if that was actually like work, 'cause you know how I work with you over the weekend. I was like, is that like a counselor? He was like, 'yes'. So I put you down.

In this role I provided the boys with 'critical navigational skills' (Solórzano & Villalpando, 1998) about schooling, high school planning, and related topics. This is a form of navigation capital (Yosso, 2005), or, "skills of maneuvering through social institutions. For example, strategies to navigate through racially-hostile university campuses... but also connects to social networks" (p. 80). Pablo also points to how these worlds of school and our community center group are socially connected. Mr. H. was instrumental in helping me meet students when I first arrived in Marshall, and although I was never formally affiliated with the school, he legitimizes our community center activities as "work" and my role as a "counselor".

This is similar to what Stanton-Salazar (2011) refers to as an institutional agent:

an individual who occupies one or more hierarchical positions of relatively high-status and authority. Such an individual, situated in an adolescent's social network, manifests his or her potential role as an institutional agent, when, on behalf of the adolescent, he or she acts to directly transmit, or negotiate the transmission of, highly valued resources (e.g., high school course requirements for admission to 4-year universities) (p. 1066).

I assist the boys in connecting their digital literacy learning to their educational trajectories and serve as one point in a constellation of institutional agents, along with Mr. H., and their teachers.

Pablo's quote above is also a key -emic account, "I asked him if that was actually like work,"

here he is reflecting on the activity in the tech room, where praxis is the action of the activity, and the reflection upon it's relevance. With his question, "Is that like a counselor?," he is reflecting on my role in the tech room. But this conversation that Pablo had with Mr. H. takes place in the school environment. This means that our work together has importance and relevance to Pablo's formal education activities.

Secondary Trajectories

Near the mid-point of the project, in January, we talked about school and how their digital literacy practices in the tech room are connected to the classroom. Specifically, as high school approached, we discussed the importance of documenting what they had learned as evidence for advocating for themselves when making class choices. The idea was that an uninvolved teacher or administrator would have more difficulty dismissing a boy's informal digital literacy learning if he could provide evidence that he had completed a certain number of Code Academy lessons or had saved Sketch Up files as a drafting portfolio. The student could therefore make a stronger argument for being placed in a certain computer or design class.

These conversations brought up the topic of tracking. I asked the boys if they were aware of secondary education "tracks" and briefly described the concept to them. In general, the boys were unfamiliar with the idea that certain high school course curricula such as vocational training, general education, or college preparatory classes prepared them for certain outcomes. And although they knew that the spring semester of their eighth grade year they would visit with a guidance counselor at the high school campus to choose their classes, they didn't know to what extent their choices might be limited, and for what reasons.

Thus, our conversations included pragmatic explanations that not all courses are offered every semester, and that scheduling conflicts occur. Additionally, these discussions were critical

in that we talked about how non-dominant students, including Latino boys, were more likely to be placed on vocational or general education tracks (Oakes, 1987; Foley, 1990; Valenzuela, 1999; Suárez-Orozco & Suárez-Orozco, 1995). We discussed what factors might lead to this outcome, like standardized test scores; and how to advocate for oneself by substantiating one's aptitude via documentation like a digital literacy portfolio.

In early March the eighth-grade boys brought their high school schedule choices into the tech room and we talked about them. I introduced formal learning mechanisms into our informal environment so that they would be able to leverage these conversations as a form of connected learning from the tech room to the classroom. This awareness of tracking and introducing the possibility that the boys may have some degree of agency over the process is a form of navigational capital that develops in an informal learning environment with the intention of being utilized in a school setting.

One day just before the boys begin their self-directed work, we discussed self-advocacy, and I told the boys they need to be aware that they can ask for things from other institutional agents like counselors and administrators. About an hour into their work, Pablo asks me to clarify what I meant by “ask for things.” And I responded by telling him, ““to be placed in certain classes.” I tell him it’s, “basically advocating for yourself, and all that means is that you know what to ask for and you know it’s OK to ask for it”. Pablo tells me that he “was texting a girl and she was asking why he’s so shy and quiet, when I’m around people I’m always quiet, and she told me, ‘it’s not good to be shy and quiet’, and I never understood (sic) why she said that.”

Here we see Pablo reflecting upon his own personality traits, and how others may view those traits. In light of the earlier conversation about self-advocacy, Pablo is considering himself and the agency he has in school. He goes on to tell me that he is quiet in class, and tries to figure

things out for himself, but will eventually ask for help if he gets frustrated. There is a connection he is beginning to make between “asking” in the context of classroom interactions and advocating for oneself in the broader context of educational trajectories.

However, it is important to mention the role that teachers have in determining they boys’ educational trajectories. Near the end of his eighth grade year, Leo tells me that he began to have difficulty with classes and disengaged from schoolwork as a result. In that situation he tells me,

“My one teacher, Ms. Gaskin, that's like the only teacher I really liked. My whole school years, cause I feel like she actually believed in me, and she saw what I can do, I guess, 'cause sometimes I'll just slack, but then when I would actually try, I would do really good, I guess. And so at the end of the school year we were signing the sheets for the classes we wanted at the high, and I just put normal English, cause I didn't think I was ready for weighed honors, and so when I gave it to her she gave me this speech and she said she, like, signed it for me, she just told me I had to take it. I was like oh, OK. Even though I failed the class. Yeah, she put me in weighted honors, even though I failed. And that actually got me happy, 'cause I felt like she actually believed in me. Yeah.”

Leo’s teacher intervening in this way means he was identified by an institutional agent as having the potential to complete college-bound track work. It is a decision that Leo was not willing to consider for himself, stating that he had even failed her class. We don’t know the content of the “speech” she gave him, but we do know that four years later Leo is enrolled at the local community college.

As mentioned earlier in this chapter, the boys expressed interest in participating in JROTC in high school. Leo, when first envisioning what his high school experience will be like, said,

“Well, I'm going to--there's some program called JROTC, it's junior ROTC, and they give a lot of scholarships, and that's what I'm striving for right now. I'm trying to get a scholarship, even if it's for like one year at least. Cause that'll give me a chance to at least have a part-time job, and save up more and more for the rest of the year-”

Here Leo mentions JROTC in the context of providing scholarships. Whereas when discussing imagined futures, the boys identify JROTC as a vehicle for military preparation or as a point of

familial pride, Leo sees it as an opportunity to help him pay for college. Thus he has already begun to think about how to navigate his educational trajectory with the opportunities being made available to him.

As part of our discussion, I mention to the boys how enlistment in the military is one way that young Latino men are siphoned off higher education trajectories (Sáenz & Ponjuan, 2009), and that while joining the JROTC can provide opportunities in the form of scholarships, it can also be a space where young Latino men like themselves are persuaded to enlist in the military after high school. And we talk about how historically, black and brown soldiers have served and died in combat at rates higher than their white peers. From a critical pedagogy perspective, I was attempting to provide a broader historical context and connect the scholarship opportunities Leo mentioned to some of the dangers involved – both to their educational trajectories and their lives. However Perez (2015) reasons that involvement in JROTC is aligned with the concept of cultural citizenship, as one of, “a broad range of activities of everyday life through which Latinos and other groups claim space in society and eventually claim rights” (Flores & Benmayor, 1997, p. 15).

Other aspects of their secondary education trajectory that we discussed were grade point average (GPA), standardized testing, and advanced placement (AP) testing. The boys understood that grades were important. In fact, Francisco first visited the community center to attend the afterschool homework help hours when his parents were concerned about his grades in math and language arts. I explained the role their high school grades would play as they considered higher education trajectories and how GPA on a 4.0 scale works, something they were unfamiliar with. I continued with the example of how my computerized standardized-testing and preparation for the Graduate Record Exam (GRE) might be comparable to their future experiences with the SAT or

ACT. Specifically, I mentioned how the local public library has preparation manuals with practice tests on CD-ROMs available, and that each question has a degree of difficulty, ranging from a zero-percentile question that nobody has missed to a one hundred-percentile question that no one has answered correctly. When I tell them the test begins with a 50-percentile question, Leo is quick to respond, “Half got it correct, half got it wrong.” When I tell him that if he answers it correctly the next question will be a 51-percentile question, he says, “So they just keep getting harder.” I conclude by telling them that with practice, they will know when they get one wrong because the next question won't be as hard. The purpose of this explanation was to demystify the testing experience and give them some insight into the structure of the exams.

These conversations about how high school experiences begin to prepare one for higher education prompted the boys to ask about advanced placement classes. This is something they had heard their teachers talk about as a valuable way for the boys to earn college-credit, although they were unaware of what constituted AP coursework and testing. Here our discussions about navigating education trajectories transitioned from talking about secondary education to higher education. The ensuing subsection addresses this in the context of the boys’ experiences related to higher education as well as practical higher education concerns like planning and expenses.

Higher Education Trajectories

Despite the aspirational capital of the boys and their families, and the navigational capital we had begun to cultivate, there was what seemed like a chasm between their hopes, their teachers and administrators pushing the importance of “college,” and their empirical knowledge of higher education. I had the impression that for the boys the idea of going to college was an ambiguous one. When I asked them about friends or family that had attended college, or if they were familiar with the nearby community college campus, Matéo commented that he had seen people at a nearby bus stop that commuted there. Alex told us that his cousin’s neighbor attended

community college to study accounting, but they were the only two to make a connection from their lives to higher education in that way.

It occurred to me that one of the limits of an institutional agent is that one can only provide a certain degree of navigational capital. And much in the way that teachers can intervene in the tracking of a student, they can also organize other forms of navigational capital. The boys relate two other experiences related to higher education, a class field trip to the local community college and attending a college fair.

The boys first tell me about their field trip, where the guides talked to them about some aspects of community college. When we later spoke about the pros (proximity, lower cost) and cons (lower completion rates than traditional four-year institutions), Pablo recalled, “Yeah, 'cause it's, the one lady (tour guide) said that... it's like proven that half the people, like that stay there, they're gonna drop out after 2 years, they're just gonna drop out and go work at a job, and sometimes half of those people don't even come back.” The tour guide also mentioned that the boys would need to take placement tests and I clarified the difference between tests to assess the need for remediation versus advanced placement tests. At another point during their field trip, they visited the theatre department and Pablo correctly identified the program they were using for set design as SketchUp, specifically because he had been exposed to it during out tech room meetings. This both surprised and impressed the theatre instructor and his own teacher and Pablo was eager to tell me about at our next meeting.

At the meeting after their field trip, they asked me questions about the cost of college. They were aware that starting at a community college would be less expensive, and were aware of the responsibility of taking on student loans. I explained the concept of credit hours, that they would need about 120 credit hours to receive a bachelors degree and that most classes are 3 credit

hours. As a group we do the math, 120 divided by three. They understand this translates to 40 classes. I ask them if each class costs \$1000 how much will a college degree cost? Pablo is quick to respond, \$40,000. We agree that this is a large amount that would have to be paid for by scholarships, grants, loans, or working. When I remind them about AP courses and tests, they understand that applying this model they would be able to save \$5,000 by taking five AP courses. The purpose of this conversation was to connect their field trip experience with the practical concerns of not just enrolling, but aiding in their understanding of what is required financially, and how to improve their abilities to complete a higher education trajectory equipped with this information.

The boys also told me about the college fair they attended at the local Police Athletic League, where the eighth grade students met representatives from various regional higher education institutions. Initially they were excited to participate, but after their experience they seemed frustrated with how they had been treated. Pablo in particular tells me:

We went to the college fair and Temple and Villanova, the people (representatives), they're so ignorant. I'm not going to go to Temple, period. Why not? I ask. 'Cause the people, the ladies, we was gonna go ask them questions about the college, and instead they was talking to each other. So they were ignoring you? I interrupt. "We was standing right in front of them, we was gonna ask them questions, we was just gonna wait until their conversation was over, 'cause we didn't know how long they was gonna keep talking, and they just kept talking and then I put my paper in front of them, and then they took it and then signed it. So they ignored you? I ask again. Yes. Technically, yeah, we were supposed to ask questions and they were supposed to answer them.

Pablo tells me he had previously seen the representatives speaking with other students. I tell him this is a good opportunity to compare his experience to some of our earlier conversations about social hierarchy and class. Pablo called the representatives "ignorant," which I took to mean, "maleducados" – without manners. We talked about discrimination in general, and more specifically about how forms of racism occur during

interactions. Although I was able to make a connection between the symbolic violence the boys' experiences and our previous discussion about social inequality, they boys seemed unwilling or unable to analyze those experiences in the same way. However, the boys experience at the college fair reminds me of Freire's (1973) point of "not allowing inquiry as a form of violence" (p. 93).

Near the end of the dissertation project when I asked the boys about their educational trajectories and imagined futures, their responses oscillated from declarative statements like Pablo telling me, "I'm going to college," matter-of-factly, to Dante saying,

"I really don't know where to start- is the thing."

"You really don't know where to start with what?"

"Like, my future I guess...Like what I'm going to do or where I'm going to go, or where I'm going to go like, college-wise, like that."

Leo tells me,

Ah, I honestly don't know. I don't know if I should work one year or I don't know if I should just go straight to college. Cause I do want to go to college. That's really important to me and that's something I want to do. I want to be the first one in my family to go to college. And I don't know, well, if I should start saving up now, or like- 'cause I have a job right now you know. And yeah so, I'm thinking about saving up now, and work one year and just waste one year of my life. (Or) I could just go straight to college and get it done with. Yeah. And then later on, if I find something that I really want, I'll get my masters degrees (sic) at least or something. Or something like that, but for now I at least wanna finish my first year of college and get my first degree. That's something I need to do.

And Matéo,

Right now after high school I'm aiming for college, a good one, maybe even try to get a scholarship to not have to go to a community college, but I'll take where (sic) I can get, even though right now I really don't know what I'm going to go for as a career, right now I'm still deciding what I should do.

Metiendo Manos¹⁵

¹⁵ "Metiendo Manos" – in this instance is translated descriptively as 'to put one's hands in.' Its imperative form, "mete manos!" is not unlike Henry V's call to arms, "Once more unto the breach,". It's a call to get one's hands dirty, to struggle, to commit, to let others know there's a fight coming

The culminating element of navigating educational trajectories focuses on the risks involved with the boys pursuing their chosen educational trajectory and the resilience necessary to complete that trajectory. In critical pedagogy terms, they are faced with an untested feasibility – something they do not have experience with, yet must attempt. I tell Leo during one of our last meetings,

I think the people that do best in life are the people who are willing to take risks, and like we were talking about when you're facing a fear of an unknown situation, like they just *mete manos*, you know, like they just go for it... and sometimes you fail, I think that I've failed at shit plenty of times-

Leo laughs – I fail a lot.

But you just have to have that, like you were saying, confidence, right?

Just keep trying. You gotta just keep on going, Leo confirms.

The boys demonstrate a high degree of aspiration and commitment to their educational trajectories, yet there is a lot of uncertainty about how to navigate those spaces. The interventional purpose of our conversations is to provide information about how formal educational mechanisms function so they can make decisions about what types of risks they will choose to take in the future regarding secondary education tracks, self-advocacy, the military and community college, and higher education financial responsibility. The boys will face limit situations in each of these areas of their educational trajectories, which will require a corresponding limit act. In my role as what Stanton-Salazar labels an institutional agent, or what Freire calls a dialogic coordinator, my purpose was to create a social space where the boys could discuss their experiences and aspirations about formal education. Learning to navigate educational trajectories in this instance is becoming knowledgeable about systems of education as a form of capital.

(see also Rubén Blades *Metiendo Mano*, 1977; *Adventures in Babysitting*, 1987; Three 6 Mafia's *It's a Fight* 2006).

Conclusion

At the beginning of this chapter, I set out to answer the following questions: In a community of practice facilitated by a critical Xicanx ethnographer, how do the boys as emergent technology experts formulate narratives about their educational trajectories and imagined futures relative to their technical and social practice skills development, as well as their current lived experience?, and; By relating praxis to the boys' learning and educational trajectories, how does a critical Xicanx ethnographer function as what Freire describes as a coordinator?

First, over the course of the critical media literacy exercises, the boys demonstrated a developing ability to deconstruct the social inequities they observed in *The Hunger Games*. They were able to connect school-based lessons about social class into our filmic analysis. They also compared the class structure to their own lived experience, and in doing so made a problematic distinction about their position as middle-class, i.e., having food and shelter. We conducted the critical media literacy sessions as a group, and the boys shared insights supported by evidence and also began to make inferences. These were skills they would be able to employ as we entered into conversations about how they understood navigating their life from the present to their imagined futures.

When asked about what they “would like to be when they grow up,” by teachers and counselors, they boys reported being unsure. They primarily expressed interest in going to college or participating in the military. These were their first formulations in narrating their imagined futures. Over the course of the study the boys began to connect their emerging tech expertise with the possibility of pursuing a career in technology, however they remained unsure of how to navigate available educational pathways to arrive at such an imagined future.

To this end I first functioned as a coordinator, facilitating dialogue with the boys about how to identify and possibly overcome socially inequitable situations, such as being placed on a secondary educational track that did not align with their plans, or being subjected to symbolic violence and ignored during a college fair. Later, I took a more direct role when the boys voiced concerns about high school and college. I gave explicit explanations about what to expect regarding high school course choices, standardized testing, and the financial responsibilities required for college completion. These were forms of navigational capital I provided with the intention that, in Freirian terms, the boys would be able to overcome a limit situation by using this information as part of advocating for themselves.

It is important to acknowledge in this ethnographic account that my role as a coordinator or institutional agent was limited, and necessarily augmented by the support the boys received from engaged teachers and counselors. While the boys' knowledge of higher education environments was minimal, these other institutional agents provided access and exposure to college-going trajectories by placing them on preparatory tracks and organizing field trips to the local community college. The boys acquire aspirational and navigational capital and there are many educational pathways available to them. Near the end of the study the boys appear a bit more hopeful and less uncertain about their futures.

The work I describe in this chapter, I argue, also illuminates a process of *metiendo manos*, making a commitment and taking risks when faced with an educationally-related limit situation. To *meter manos* is to instantiate a limit act, to have courage in the face of that uncertainty and remain committed to hope for the future, and, importantly, to connect their developing work ethic to that commitment. In the next chapter I turn to focus on how the boys develop their identities as they socialize while engaging in technology-related learning practices.

CHAPTER 5: A Digital Literacy Community of Practice

Many stories have been written about young Latino men and their pursuit of education in the United States. In education research, these accounts have historically been framed in relation to culture of poverty (Lewis, 1959) and deficit (Solórzano & Yosso, 2001) perspectives. Interpretations of Latino students' experiences in K-12 and higher education settings frequently use terms like disengaged (Ream & Rumberger, 2008), in-crisis (Lerner, 1994), and at-risk (Finn & Rock, 1997). More recently, research has emerged that: a) challenges achievement-gap formulations of academic success as racist (Kendi, 2016); b) parses how young Latino men are siphoned off the educational pipeline (Sáenz & Ponjuan, 2009; Rios, 2011); and, c) reframes young Black and Latino men as asset-laden learners (Carrillo, 2010; Harper & Williams, 2014). My aim here is to contribute to the literature in the latter category by documenting how a group of Latino boys brought assets, in the form of technology-related learning practices, to an out-of-school program, and how the boys continued to develop those practices in a social manner.

Too often, even when young Latino men have been framed as asset-laden within the context of schooling, it is only institutional measures like grades and standardized test scores that define an "asset" (Rong & Preissle, 1998). When I visited Central Marshall Middle School, I observed how the boys were provided with rigidly structured learning opportunities, wherein most every minute of their day was accounted for and the process of learning orchestrated for them in terms of pre-determined learning objectives, assessment tools, and strict behavioral management approaches. I contend that this overly structured approach to teaching discourages self-directed exploratory learning for youth at all socio-economic levels, but especially for youth growing up in low socio-economic neighborhoods like Marshall where out-of-school enrichment learning opportunities are often scarce.

When extracurricular learning activities are not generally available in the community, then the forms of learning that occur in the home become important focal points for anthropologists and educational researchers. Home environments allow for the opportunity to organically learn values and skills as described in funds of knowledge (González, Moll, and Amanti, 2005) and community cultural wealth (Yosso, 2005) literatures. However, parents often have educational aspirations for their children, as do the children themselves, which exist outside of the areas of expertise of the parents and family members. As such, they may directly lack the dominant forms of capital within the home required to access the resources necessary to realize these aspirations.

In between the school and home contexts are what Kris Gutiérrez and colleagues describe as third spaces (Gutiérrez, Rymes, & Larson, 1995; Gutiérrez, Baquedano-López, & Turner, 1997; Gutiérrez, 2008), “particular discursive spaces... in which alternative and competing discourses and positionings transform conflict and difference into rich zones of collaboration and learning” (Gutiérrez, Baquedano-López, & Tejeda, 1999, p. 286).

My work in this project is founded upon the presuppositions that in a New Latino Diaspora (Murillo & Villenas, 1997) setting where social institutions like school districts are slow to accommodate the needs of a rapidly growing Mexican-origin community like the one in Marshall, PA, third spaces are necessary to provide proactive learning programs. Based on this, I created an alternative learning environment in a community center tech room to address these questions: In a third space setting, how do Latino middle school boys learn digital literacy skills while collaborating as a community of practice? How do the boys’ extant digital literacy practices contribute to their ability to participate in a community of practice and to collaboratively develop new digital literacy skills? And, in what ways do the positionalities of the researcher and the

participants contribute to how learners take up new practices as domains of emergent expertise?

The development of this learning space was founded upon the following presuppositions about learning. First, drawing on the work of Lave and Wenger (1991), I sought to approach learning as inextricably linked to social practice, and to create with the boys what the authors refer to as a community of practice. Second, Valenzuela's (1999) research into how schools "subtract" languages and cultural knowledge, paired with Gutiérrez, Rymes, and Larson's (1995) Script/Counterscript formulations reinforced the idea of a third space as a setting in which the boys' authentic social participation in pursuing their interests could be validated as a valuable learning practice. Third, I build upon Moll and colleagues' (2005) idea of how students can bring their "funds of knowledge" from their lives outside school to enrich learning in school. Finally, the work on Connected Learning by Ito et al. (2013) strongly shaped how I understood the boys' valuation, acquisition, and circulation of forms of learning and knowledges in between school, home, and our regular meetings. In the tech room learning space the technological funds of knowledge the boys possessed were not ignored or "subtracted". Rather, I recognized and intentionally drew upon their prior experiences with technology in school and out-of-school contexts as a foundation for their learning more advanced skills. The multiplicity of learning spaces within the boy's lives were acknowledged and validated in this way and the individual interests that motivated their learning outside of school became central to their self-directed learning in the tech room. This approach to learning served to decenter and challenge more structured school-based instructional practices as well as the deficit assumptions that too often inform expectations for and assessments of Latino student learning. The central aim of the project was to investigate how our experiences together in this alternative learning environment might influence how the boys engaged in learning practices and in so doing possibly support the boys in

developing identities as active and successful learners.

The dissertation project provided the boys with access to technological resources not available in their schools or homes. They also were given the opportunity to participate in loosely structured sessions in which the learners largely determined the learning objectives. I also solicited advice from experts in the technology sector as to what programs and practices might be accessible to middle-school boys. In addition, I offered myself as a tech room “coordinator”¹⁶ (Freire, 1973, p. 42), a source of information and support for an array of learning purposes such as lesson-related problem solving, guidance with technical issues, and advice on navigating their future higher education trajectories. What followed for the boys was self-directed digital literacy learning in a community center technology room with a group of Latino peers and a Latino mentor.

In my role as coordinator, I made no claims to having technological expertise in the domains of digital literacy the boys were exploring. Because of this, I often found myself in the position of co-learner (Rheingold, 2014), that is, acquiring new digital literacy skills alongside the boys, sometimes modeling my “think-aloud” learning processes, and other times accepting their offers to help me. This sociocultural and interactive approach to learning has been identified particularly in the field of literacy as a way to enhance the learning process as well as what is learned:

From a sociocultural perspective, children develop, acquire, and are socialized to various literacies as they actively participate in culturally defined systems of practices such as participating in religious education classes, playing sports or games, and participating in formal and non-formal schooling activities (Cole, 1996; Goodwin, 1990; Heath 1991; Turner, 1997). In these contexts, interaction and language are the vehicles for bringing together what novices and experts or “newcomers” and “old-timers” know. Here we mean that both teacher and students can be both experts and novices at different points in time and across

¹⁶ This role will more fully examined in final ethnographic account chapter.

many situations (Gutiérrez & Stone, 1997; Lave & Wenger, 1991; Rogoff, 1990). In the context of literacy learning, students acquire knowledge as they assume increasingly complex roles in activities with others” (Gutiérrez, Baquedano-López, & Turner, 1997, p. 369).

This dissertation project supports this sociocultural literacy learning perspective, and builds upon it by bringing the digital literacy practices of young Latino boys into the conversation. It also contributes to the disruption of hierarchical master-apprentice narratives common in communities of practice literature. Further, in the course of disrupting this hierarchical model, this project challenges the primacy of school-based practices cultivating “asset-laden” learners and redirects the focus to self-directed practices in a third space. This approach allows for a broadening of how young Latino men have been framed in education and anthropological research. I document how this group of Latino boys arrived with sets, or repertoires, of digitally-mediated learning practices, how they expanded upon those practices independently and collaboratively, and how they discussed imagined futures related to the mastery, or emergent expertise, of these skills.

Communities of Practice and Legitimate Peripheral Participation

The concept of communities of practice has evolved over the past few decades and expanded in its application across contexts. Wenger-Trayner & Wenger-Trayner (2011) define a community of practice as, “a group of people who share a concern or a passion for something they do, and learn how to do it better as they interact regularly”. This definition is broad, but it provides us with a general idea of who is involved, why they have come together, and the outcome of their mutual endeavor. The concept was first introduced in Lave & Wenger’s *Situated Learning* (1991). The learning process set out in this work, a process of novices learning together with experts, draws directly from Jean Lave’s anthropological work with tailors and their apprentices in West Africa. In this chapter, I apply the concept to explain how boys who had a passion for technologically-related activities worked together to expand their digital literacy skill

set.

More specifically, it is Lave and Wenger's work on legitimate peripheral participation (LPP) within communities of practice that provides an analytical lens for this chapter. In *Situated Learning*, they propose a shift in the unit of analysis of learning from the individual to the social. By situated, the authors mean, "learning as (an) integral and inseparable aspect of social practice" (p. 3). In articulating an historical-cultural theory¹⁷ of situated learning, they use the term legitimate peripheral participation to indicate how, "learners inevitably participate in communities of practitioners and that the mastery of knowledge and skill requires newcomers to move toward full participation in the sociocultural practices of a community" (p. 29). Thus, to form a community of practice, newcomers—like the group of eight Mexican-origin middle school boys in this study--begin with legitimate peripheral participation.

Lave and Wenger describe legitimate peripheral participation as a historically and culturally bound "analytic perspective" (p. 39), rather than a pedagogical strategy. This means that learners exist in a setting having acquired forms of knowledge over time and across cultural practices. Specific to the boys with whom I worked, and the context in which we worked together, legitimate peripheral participation takes into account the forms of knowledge that they have accrued in home, school, and other social settings (e.g. church, organized sports, extra-curricular interactions with friends). LPP is then, "a descriptor of engagement in social practice that entails learning as an integral constituent" (p. 35), meaning that the boys have acquired learning practices within the aforementioned settings. This is important as I argue that the boys began the project by bringing in their own forms of digital literacy practices, i.e., that the group of boys weren't learning digital literacy skills for the first time, or in an isolated manner, but

¹⁷ Cole & Engeström (1993) use the acronym CHAT (Cultural-Historical Activity Theory) in building upon the work of Vygotsky and Leontiev.

expanding the sets of skills they were already adept at practicing.

Lave and Wenger continue by describing their conceptualization of learning as one where, “agent, activity, and the world mutually constitute each other” (p. 33). This is a departure from theories that consider learning as either a primarily cognitive/replicative practice or limit the social perspective of learning to a basic transfer of knowledge. Further, LPP is, “learning as an integral part of generative social practice in the lived-in world” (p. 35). Taken together, the generative and mutually-constitutive approaches in which learners both create and participate in the world helps to explain the processes that I describe in this chapter. Before I met the boys, they were engaged in technology-related forms of learning in various contexts that were both cognitive, meaning that they practiced in order learn; and generative, that they learned as part of practice. This aligns with Lave and Wenger’s belief that situated learning is a bridge between cognitive and social practices. The ethnographic accounts analyzed in this chapter move from the specific technology and digital literacy related learning practices the boys were passionate about before beginning the program, to how those interests generated LPP during the course of the study, and later how they initially formulated ideas of how to integrate their forms of emergent expertise in their lived-in world.

Lave and Wenger present historically and culturally bound case studies of LPP among midwives, tailors, quartermasters, butchers, and recovering alcoholics¹⁸. Similarly, it is my aim here to provide a historically and culturally specific description of Latino boys expanding their digital literacy skill set alongside a more experienced Chicano¹⁹, with over 20 years of experience of computer-based learning. I assisted the boys while continuing to learn with them. Here I

¹⁸ In these examples they use a master-apprentice framework.

¹⁹ As with Latino, I use Chicano here to index an individual identifying as male-gendered. I use Chicana to index individual identifying as female, and Chicanx for non-gender conforming individuals as well as groups of more than one gender.

deploy the term digital literacy in its broadest sense. One definition is, “the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills” (Visser, 2012, para. 2). Ávila and Pandya (2013) view digital literacies as, “those practices in which people use technological tools to engage with, respond to and create both text-based and multimodal forms of literacies” (p. 3). These definitions encompass a wide range of technology-mediated learning practices. The forms of literacies and learning practices I describe fit within these definitions.

Prior to initiating the formal dissertation study, I spent three months volunteering in the Central Marshall Middle School cafeteria. I met several Latino boys (four of whom became participants in the study) who had already formed a *de facto* community of practice that centered around their video game of choice, a single shooter, point-of-view series, *Call of Duty*. Huddled around their cafeteria trays, these boys recalled the battles they fought ‘together’, online, the night before. And in the same way that members of a sports team may recount memorable plays from the previous night’s game, they would rib each other for mistakes made, and share tips. The two boys from another school that also participated in the dissertation project were familiar with this genre of video game, though they preferred the role-playing games that followed a hero’s journey narrative. In the community center there was, among the whole of them, a respectful acknowledgement of each other’s preferred gaming habits. Gee (2015) describes gaming as a form of digital literacy,

A gamer needs to know how to “decode” images and actions (and often, too, words) on a screen into meanings (that lead to decisions and actions). This is a new form of reading. And some gamers learn how to use software (which often now comes with the game) to modify (“mod”) and design games. This is a new form of writing (p. 55).

Gaming, and to a lesser degree their mobile device use, were the common extant digital literacy practices the boys brought with them into our sessions. Gaming was social in nature, even

the boys that played role-playing games alone, or disconnected from the internet, shared their experiences and expertise with the others later, during conversations in the tech room. Such practices required that the boys be familiar with the functioning of the hardware and software, how to connect their gaming system to the internet, if available, and how to troubleshoot any issues. These previously acquired forms of experience with technology also lent them a degree of confidence when troubleshooting hardware, software, and connection issues with the iMac terminals in the tech room.

This familiarity with hardware, namely their gaming consoles like the Sony PlayStation 4, Microsoft X-Box, and Nintendo Wii, served as an entrée to another topic of conversation among the boys, hacking. A few of the boys in the school cafeteria claimed to “know someone,” or, “had a friend” who had successfully hacked their gaming console for various purposes: removing parental restrictions, accessing paid content at no cost, even manipulating the games themselves, what Gee references above as a “mod”. None of the boys I spoke with could provide specific instructions on how to hack a gaming console, but they all seemed to agree that one would have to know how to write software code. Their fascination with hacking led to an interest in coding, and thus became my entrée for suggesting they participate in a digital literacy program.

Legitimate peripheral participation provides a framework for understanding how the boys’ interest in gaming and hacking led to coding. In the following section I will describe the extant digital literacy practices of the boys and how these developed practices provided learning opportunities. Then, I will explain how the boys acquired new digital literacy skills in various domains (e.g. coding, art and graphic design, drafting) using specific learning platforms of their choosing, and how the tech room functioned as a third space to enable a process of collaborative learning.

Extant Digital Literacy Practices

The boys I first met in the Central Marshall Middle School cafeteria were savvy consumers of multiple forms of digital media. The conversations they had about gaming were peppered with mentions of recent anime episodes, viral YouTube videos, and gossip circulating via messaging apps they used on their mobile devices. This is not a comprehensive list of all of their digital literacy practices, but an introduction to how they used technology for learning, communication, and meaning-making. It is important to know their prior experiences because they provide a framework for understanding how the use of these specific devices, and engagement in these specific practices, served as a foundation for them to further their digital literacy skills.

Devices

In informal conversations and formal interviews in the tech room, all eight boys reported engaging in multiple forms of digital literacy practices. They used gaming consoles and mobile devices to interact with the world around them, and the world beyond them. With two exceptions each of the boys had some form of late-model mobile device. Two owned smartphones, and were responsible for paying the monthly bill. They appreciated being able to save money by using the community center's wireless (Wi-Fi) signal to prevent them from having to use his cellular data plan. Four of the others used internet-connected .mp3 players, like the iPod Touch. When connected to a Wi-Fi signal, these devices could download apps for a variety of functions, making them de facto communications devices comparable to a smartphone. The boys used text messaging, and apps like KiK and Facebook Messenger to communicate with their friends. They also reported downloading different game apps.

Beyond everyday knowledge of how to use such mobile devices, one of the boys, Pablo, told me that his iPod was "jailbroken", meaning it could download and use apps not sanctioned

by Apple. To do this requires an understanding of how the iOS, or operating system, works and how to subvert it. When I inquired how he had done it, Pablo told me that his eighteen-year old cousin had done it for him. This demonstrates that in broad terms, skills like jailbreaking an iPhone existed in Pablo's family and circulated in secondhand fashion. Which is to say, Pablo learned that such a technological operation was possible, a precursor for learning how to perform this task himself.

Most of the boys also had a gaming console at home. Half of them talked about playing online games with their friends via their gaming consoles and home internet connections. Only three of the boys reported having laptop or desktop computers at home. Those who did have such equipment reported it as outdated or in some state of disrepair and preferred to use their mobile device or their parents' smartphones for everyday tasks. Two reported having neither a laptop/desktop computer or internet access (Wi-Fi) at home and would rely solely on a parent's or older sibling's smartphone for a cellular data connection to look up necessary information. Even for those that did have an internet connection at home, it could be a low economic priority, and the boys would sometimes report not having internet access at home for a few weeks when the bill went unpaid.

The relative lack of functioning laptop/desktop computer terminals in their homes presented a challenge in having to familiarize them with the Apple computers in community center:

I ask Leo if he's familiar with iMacs and he says, "not really". I ask to see his mouse and show him how to put files in the trash and how to rename folders on the desktop. I ask him a question, "How do you..." and he answers incorrectly, "I just delete it, I guess?". Then I explain to him how click on the folder twice, slowly, and the cursor appears, "oh yeah, it's like the iPod?" "Exactly," I tell him. "Oh yeah, I know," Leo confirms.

Although they were generally inexperienced with the tech room's iMac terminals and their

functions, familiarity with the iPod devices meant they had a transferable skill set because of the similar interface.

E-sports

Alex's interest in gaming extended beyond online collaborative play with his friends, into the specific genre known as e-sports (Taylor 2012; 2019), wherein gamers become spectators for more experienced, even "elite" gamers²⁰. During our sessions he would frequently speak with me about his interest in e-sports or call me over to show me a video screen capture of a first-person shooter game on twitch.com — usually from the popular, *Call of Duty* series. These video screen captures — most recorded, some live — would show the game being played collaboratively online. The players were audible, and sometimes picture-in-picture images of them wearing headsets were visible. The players were mostly young white men. Games such as *Call of Duty* represent a specific type of genre of gaming. The vulgar and violent nature of this particular genre is made evident in the graphic cursing and epithets the gamers hurl at each other. These verbal outbursts complement the graphic violent visual images of shooting, killing, bloodletting and explosions²¹.

On one occasion, Alex showed great interest in telling me about a father and son team that played first person shooter games together and broadcast their gaming live. Alex had avidly followed their broadcasts and knew a great deal about them. He knew that the father was fifty years old and the son was seventeen years old and they played certain nights from 10 p.m. to 4 a.m. He mentioned that they were sponsored by a company that makes expensive video game controllers. When I asked him how they recorded their gaming, Alex looked up a webpage selling a DVD player-like box that connects to the gaming console and a laptop/desktop computer. He

²⁰ I discovered there are global competitive level gaming contests, wherein teams compete against each other in arena-like settings with thousands of audience members present and several thousand more viewing the live stream online.

²¹ I address this particular genre as a mode of toxic masculinity in the next chapter

knew this piece of hardware was necessary for recording and broadcasting one's gaming sessions. He coveted it, but the price tag of between one hundred to two hundred dollars put it beyond his reach. He explained to me how people subscribed to watch certain gamers – paying a fee of five dollars monthly, and how this father-and-son team was especially popular. Alex's passion for e-sports led him to consider how could monetize his expertise. If only he could find a way to buy that box, then he would then be able to dedicate his free time to gaming online and attract subscribers who would pay him five dollars a month to watch him play.

Reflecting on my experience with Alex more generally there are three factors worth mentioning related to communities of practice, digital literacy, and third space learning environments, respectively. First, Alex's interests led me to learn more about the world of gaming, and e-sports, specifically. As we were both part of a community of practice, this is one instance in which I took part in legitimate peripheral participation. Alex introduced me to this genre and demonstrated certain features like the website, requisite hardware, and thousands of gamers playing and spectating.

Second, it allowed me to examine my own previously held personal views, – that gaming was a passive activity, and expand my understanding of digital literacy. Upon further reflection I understood that for Alex, it was a meaning-making activity. The father and son team play was enviable and the possibility to shift from spectator to e-sports participant seemed lucrative for Alex. His intense interest in the website, the gaming recorder, and his perceived potential to earn money using a skill he enjoyed practicing is an example of situated learning where, ““agent, activity, and the world mutually constitute each other” (Lave and Wenger, 1991, p. 33).

Third, I had missed an opportunity to learn more about the situated learning in which Alex was engaged. Alex wasn't able to pursue his self-directed learning interest of e-sports in a

school classroom, because the vulgar and violent nature of the games themselves would have violated institutional policies. What specific factors led him to be so enthusiastic about e-sports? How did he envision participating as possibly constructive for him, for his family? How could he learn from it and, in doing so, possibly transform his life? What were the values behind the activity - and how did they align with his own values? As a third space, the community center tech room was ideal for exploring these questions. But I was so new to e-sports as a form of digital literacy learning that I did not fully appreciate its potential as a form of literacy. In a way, I had fallen back into the rigid role of classroom teacher and the narrow definitions of reading and writing, and how they functioned and held value in the world. After a few weeks, I began to actively discourage him from watching the videos and suggested he move on to one of the programs or online programming platforms the other boys were using.

Role Playing Games

Some of the boys arrived at the tech room program having experience with role playing games (RPGs) in addition to the shooting games. Dante, in particular, expressed his interest in sharing his two favorite games, *The Last Story*, and *Zenoblade Chronicles*. In the first few weeks of our sessions at the tech room, he brought the Nintendo Wii game discs, complete with a detailed booklet of instructions and maps about the hero's journey-type game narratives. After he repeatedly asked me if he could bring his game console and games to the tech room I relented, under the condition that he provided the group with a demonstration of the games from an expert's perspective. The next session, I asked him to give us explicit instructions on how to play the game. We asked questions and Dante answered them comfortably, standing in front of the room. He gave me step-by-step instructions on how to use the controller. The first few minutes of *The Last Story* was a high-quality, detailed Tolkienesque filmic introduction of the characters and objective of the game, a stark contrast to the single shooter point-of-view games Alex had

introduced me to. The characters' spoken dialogue had vocabulary that would be considered above their grade level and I realized the potential for language acquisition as some of the boys began to repeat the dialogue verbatim.

In this instance, Dante is participating as a member of our community of practice demonstrating his extant expertise with games that contain complex visual and linguistic narratives. We are the novices and he is the more experienced member of our group with this specific digital literacy gaming genre. I contend that the demonstration positioned him as having expertise in this area of technology, and therefore strengthened his individual identity within our community of practice as a source of knowledge for this form of gaming. Additionally, his demonstration represented an inversion of the traditional unidirectional authority roles of teacher and student and provided him with experience of speaking in front of a group of peers, practicing a specialized terminology in a third space learning environment.

Learning New Digital Literacy Practices Together

To this point, I have described how the boys participated in extant digital literacy communities of practice via gaming, e-sports, and mobile-device use prior to beginning the study. In this section I will apply a communities of practice perspective to more closely examine the digital literacy learning practices in the tech room that were new for the entire group of boys. As mentioned above, I leveraged the boys' interest in hacking for the purposes of suggesting that they learn how to write software programming code. While all of the boys initially experimented with the code writing applications, because I stressed the self-directed nature of learning in the tech room the boys were free to explore graphic design, 3-D drafting, and filmmaking²² applications, among others. Therefore, in subsequent sessions, I introduced them to software and

²² Due to a lack of cameras and devices with which to film, exploration of the iMovie application was cursory and therefore not included in this discussion.

web-based platforms recommended by IT professionals²³. These are the programs that they came to use the most through the course of the study.

There was no pre-planned curriculum for the course of the study, but it was my intention to provide the boys with some basic instruction in everyday digital literacy practices that I had found useful. For example, during the initial sessions the boys required more explicit and guided instructions for tasks like finding icons and opening folders. Much of the knowledge and skills that computer-literate professionals use daily without much thought had to be painstakingly explained. I provided them with step-by-step instructions for performing tasks like formatting and sending an email, why and how to protect one's online privacy, logging-in/out processes, safely downloading software and updates, optimizing internet search terms, etc.

The eight boys and I met regularly on Wednesday and Saturday afternoons during the first summer of the program. During those two to three hours sessions, especially during the first few weeks, we engaged in a combination of practices. Like most social activities, from bowling (Putnam, 2000) to barber shops (Alexander, 2003), we began our sessions with small talk about how things were going at school and at home. In the spirit of reciprocity, I always tried to share something personal after asking them about their home and school experiences, from something funny that my dog did, to a setback in my own studies that had upset me.

This section will detail how the boys began learning new domains of digital literacy, how we collaborated, sometimes self-directed, and other times how I offered guided exploration as forms of learning in a community of practice context. Additionally, there are examples of how

²³ I contacted information technology (IT) professionals via the University of Pennsylvania's IT listserv and Mac users network listserv in the first month of the project to ask for recommendations for no-cost web-based computer programming learning tools accessible to middle-school aged students. Their recommendations were wide-ranging, including classroom-like structured lessons via MOOCs (massive open online courses), university-related courses via iTunes U, technology-oriented undergraduate mentoring programs, and several other options.

connected learning (Ito, et al. 2013) functioned through the third space of the community center to the school, home, and surroundings. At times they communicated their frustration or disengagement with a certain activity, and I examine how, as a community of practice, we explored the boundaries between self-direction and guided exploration, as I encouraged them to pursue the development of their digital literacy skill set. Conversely, there were instances in which self-directed learning and collaborative learning ran its course, such that we individually and collectively abandoned certain practices and/or platforms. Learning with and learning from the boys connects the concept of communities of practice to the data gathered in the tech room: that the boys and I formed social bonds as we learned together, and learned in the process of forming social bonds. We each brought digital literacy skill sets into the tech room, specializing in different areas and at different levels of development. What follows are the short descriptions of how the boys and I engaged with various domains of digital literacy learning.

Email and Google Apps

In one of our first meetings, the first activity I asked the boys to complete was creating an email account, specifically using Gmail to allow for easier access to Google's array of applications²⁴. Having an email account, I reasoned, would allow for entry into a standardized form of professional communication, an essential digital literacy skill that I was not sure they used at home or school. It was my intention to structure these sessions in as decentralized a manner as possible, meaning I positioned myself as a coordinator, or guide for their learning. I provided explicit instruction only when necessary, but communicated the expectation that the boys work together and help each other. I had the boys collaborate in this way to create their email accounts, and they asked each other questions about finding certain menus and commands.

²⁴ These applications include e-mail, calendar, note taking, word processing, spreadsheet, and cloud storage functions, among others.

This allowed them to learn from each other, and contribute to their understanding of the tech room as a third space that encouraged a greater degree of autonomy than found in their school.

I guided them through the process of entering their names, choosing a Google username, and also indicated the functions of certain icons on the main Gmail page, for example, showing them how to log in and log out. I told them to think about an appropriate username, “nothing bad, so that once you are in high school you can share you email address with your teachers,” and, “do not use your birth year as part of your username”. We discussed the importance of protecting one’s privacy, especially because they are minors. Privacy concerns also extended to discussion of their passwords, I wanted to impart a sense of autonomy and told them that, “these are your email accounts, I don’t want to know the password.” I finished with explicit instructions on the different components of an email message, and how checking their email will be one of the first things I ask them to do at the beginning of each of our sessions.

Once they had their e-mail accounts set up, they were able to use those e-mail addresses to create scratch.mit.edu and codecademy.org accounts - a necessary step for accessing these programs that offer no-cost coding lessons. For a few sessions after this I had to remind them to check their email when they first arrived at the tech room. Although soon after, the four boys with mobile devices would begin checking and using their email on their devices periodically between meetings, and after about a month it was one of a handful of ways I would communicate with the boys outside of our sessions²⁵. Use of these other platforms was an extant practice, and they integrated e-mail as another mode of communication because of their participation in the tech room sessions.

The boys also spent time familiarizing themselves with a few of the connected Google

²⁵ Some others include text/SMS, Facebook messaging, and the KiK messaging app.

apps, including the calendar. I explained how I use it to keep track of things like appointments, sporting events, birthdays, etc. In a later session, Matéo said he was interested in running a 5K race several months in the future. I suggested he put the date on his Google calendar with a reminder a month before to register for the run. In this instance, what I observed was a shift in orientation, a form of digital literacy that allowed Matéo to use a browser to search for running events, and Google Calendar to make note of the date. This gave him access to real world events he had not previously been aware of, and the ability to participate in those events by autonomously managing his online schedule. Here again we see Lave & Wenger's assertion that in situated learning agent, activity, and world constitute each other.

We explored the other Google apps and a couple of the boys stated familiarity with Google Drive and Google Docs, cloud storage and online word processing. Their homeroom teacher had them share data for a project using it²⁶. With this instance of connected learning, their established school practices validated our nascent third space digital literacy practices, and they voiced an approval that helped to legitimize our newly-formed community and the practices I suggested.

Coding

One of the main activities the boys engaged in over the course of the project was coding, or learning programming by practicing various computer languages. As mentioned above, the boys wanted to learn how to code because of their interest in hacking. They knew that learning how to code was the first step in becoming a "hacker". I decided to begin by introducing them to

²⁶ A New York Times article by Natasha Singer from May 13, 2017, "How Google Took Over the Classroom", describes how Google marketed laptops and apps directly to public school teachers beginning in 2012, just before the beginning of this dissertation project. Since then, the use of Google Chromebooks (laptops) in classrooms has grown rapidly. This indicates the utility of the laptops and apps, and also the need for this type of digital literacy learning among public school children who may not otherwise have access to such resources.

two web-based platforms that aligned with the research design and their emergent interests: scratch.mit.edu, and codeacademy.com.

The purpose of the Scratch program is to allow children and adolescents to learn the principles of coding (Kafai & Burke 2014). Scratch consists of a graphical user interface (GUI) in which the user stacks blocks, each consisting of a command, in order to execute a series of commands that move a 'sprite', or animated figure, on the screen. There are commands such as, "walk _____ steps", where the user controls the variable number of steps. The sprites can also jump, flip, and move backwards. By linking these blocks of commands in one section of the screen, the user is able to have the sprite execute this sequence of commands in the main window.

The boys understood how the sprite moved in two dimensions, up/down and left/right, and connected that learning to their school math lessons about Cartesian planes using x,y coordinates - another example of how they imported school-based knowledge into the tech room. While all of the boys explored Scratch, none of them maintained interest for more than half of a dozen sessions. Two boys in particular, Pablo and Dante, quickly moved away from it after I suggested they create Code Academy accounts and try coding in HTML - the foundational programming language used for creating web pages. Later, when I inquired about their loss of interest in Scratch, they said, "it was for kids". They had expressed interest in becoming hackers, and it appeared that the Scratch interface that used cartoon-like sprites did not match their more sophisticated expectations for what coding entailed.

The Code Academy program allows users to select which computer programming language they would like to learn. The boys explored learning HTML, CSS, PHP, Javascript, Ruby, and Python. Each computer language section is broken down into units, modules, and lessons, similar to how curricula are structured in school. The user's progress is tracked by a

‘percentage complete’ bar, visible after completing a module and also on their profile homepage. They also earn ‘badges’ for completing certain lessons, a type of extrinsic reward system. The boys were very proud of the badges they earned, and often vocalized their enthusiasm when earning a badge. This enthusiasm often led to competition between the boys in comparing completion percentage and number of badges earned.

All of the boys created Code Academy accounts, and most of them completed a handful of modules before expressing interest in exploring another program. However, Pablo and Dante remained engaged with Code Academy for the length of the dissertation study. They appeared to enjoy the challenge of solving problems within the code and advancing through lessons and modules. When the boys were working on Code Academy lessons, both independently and collaboratively, I usually walked around the room offering encouragement and positive reinforcement. Writing code is very unforgiving, an extra space or one character misplaced can result in a syntax error and several lines of code being rejected. In the beginning they would often ask for my help when they wrote and submitted code that was incorrect. Although I have had limited exposure to learning and practicing HTML code, most problems could be solved by a close reading of the instructions, wherein they had omitted a line or “tag”. Other times it was an issue of syntax - with too many or too few spaces between characters.

A salient point of helping the boys to problem solve issues with their code was that over time I became more proficient at quickly identifying errors. Additionally, there were times when I suggested a solution, but the boys had already attempted it unsuccessfully, and we would return to read the first step of the coding instructions together. In both of these instances, what is apparent is that I was learning *with* the boys, and I was also learning *from* the boys. In our community of practice, I may have been a ‘master’ of close reading, but I was a novice when it

came to coding. The boys were learning how to practice close reading of the coding instructions, an essential digital literacy skill for coders developing their expertise.

In addition to the Scratch and Code Academy lessons, I occasionally presented media to the boys in an attempt to connect the abstract nature of writing lines and lines of code to more tangible processes and products. Together we looked at a Lifehacker.com article, “Which Programming Language Should I Learn First?” (Pinola, 2013). Taking the time to read these together led to a technical discussion between myself and the boys about servers, and the difference between front-end, back-end, mobile, and gaming programming languages. This conversation provided an entrance into recognizing their status as emergent experts. They acknowledged the existence of domains of expertise within programming, design, and even marketing, “How do you draw people in?” I ask Pablo, “Why would people want to visit your webpage?” This is the beginning of Pablo and Dante engaging in legitimate peripheral participation in the coding community. Their expertise will continue to develop, and how they connect these initial lessons and resulting questions to their imagined futures.

As the boys participated in the dissertation study, there was significant media coverage about the benefits of making coding available to children²⁷, coding as a way of thinking (Pinola, 2013), and more critical viewpoints about the perils of considering coding as panacea for educational inequities (Nelson, 2017). Taken together, I consider it important to restate that my decision to focus on coding in the project was in response to the boys’ expressed interests. This informal, semi-structured time in these sessions allowed the boys to engage in legitimate peripheral participation with guidance at their request from a co-learner, myself. However, one critical consideration is the recognition that teaching kids from working class backgrounds how to

²⁷ In December 2013, President Obama endorsed Code.org’s “Hour of Code” initiative to promote computer science education among children. One year later he participated in the Hour of Code, becoming the first sitting President to write a line of code.

code is not the sole solution for their economic situation, nor does it ensure socio-economic mobility.

Art and Graphic Design

Another focus for digital literacy skill development built upon a few of the boys' interest in art. This digital production of art tended to be of interest in particular to the boys who showed little interest in coding. Francisco, Leo, and Matéo, all expressed an interest in art and had mentioned to me that they spent their free time drawing figures like Godzilla, animé characters, and cars. The iMac terminals in the tech room were loaded with Adobe Creative Suite software, which contained Adobe Illustrator, a program used by artists and graphic designers to create digital image files. I encouraged them to explore the features available on Illustrator.

In the first month Francisco showed me some art he had completed. They are drawings in pencil and marker, of monsters including Cloverfield and Godzilla with the Philadelphia skyline in the background. I tell him he really knows his stuff, my intention is to position him as an emergent expert and an authority on Adobe Illustrator in our community of practice, beginning by acknowledging his talent with hand-drawn images. I then boast to the other boys about Francisco's encyclopedic knowledge of Godzilla movies, quizzing him aloud in front of the others. He answers my questions without missing a beat. I encourage Francisco to begin to experiment with Illustrator to recreate the drawings digitally. Once he begins exploring, he free draws and sometimes asks for my help locating a drawing tool and I use the opportunity to show him keyboard shortcuts.

When Matéo begins using Illustrator he is a few weeks behind Francisco, and despite Francisco being a year younger, his experience with Illustrator and his increased comfort in the tech room positions him as our resident Illustrator expert. Matéo enjoys watching animé programs

and drawing the characters and I ask him to Google image search for some characters he might enjoy drawing. Francisco leaves his own activity to join Matéo and shows him how to right-click on the image to save it to the desktop, and creates a folder for Matéo. In a later session, Matéo will demonstrate that he's learned how to do this by saving more images to his folder and importing them into Illustrator. I ask him about the work he did on the image "Titan" that he imported, he tells me he used the eraser function to manipulate it. This shows that Matéo is learning from Francisco in our community of practice and extending his own autonomous learning practices.

“What do I do?” This question was rare, but important. It signaled there were occurrences when the boys lacked self-direction. They were interested in using a program, but the basic suggestion to explore was insufficient. One day Matéo had an image of a sportscar on his screen and asked me this question. I responded by asking Matéo if he can manipulate it, "see if you can change all of that green to red. See if you can find a function that will cut out everything, that will allow you to cut out the car from the backdrop, try different things like that, and this will let you just get more familiar with it." Though it goes against the curricular intention of self-direction, I am attempting to give Matéo a starting point. Rather than asking him to produce a product for the purposes of explicit instruction, I am engaging in guided exploration in answering the paraphrased question of, “So what can I do with this program?” I encourage Matéo that he will "keep getting better and better at this, and you'll look back on this (project from today) in a year and you'll be like, 'aw man, that was super basic.'" In a school-based context, this perspective would align more closely with a portfolio approach to teaching, not demanding a demonstration of mastery of a skill in a moment, but privileging the process of continuous improvement over the course of learning.

Drafting

A few of the boys also became interested in drafting, via the 3-D computer-aided drafting (CAD) program SketchUp²⁸. The program allows the user to generate 3-D content for uses in fields like design, architecture, landscape design, and civil and mechanical engineering. Alex decided after the first summer to devote most of his time to working in SketchUp, and would report by the end of the project that he felt he had developed a level of proficiency using it. Leo, Matéo, and Marcos also used Sketch Up, but moved back and forth between SketchUp and other programs.

Matéo decided to try out SketchUp for the first time. Once he opens the program the tells Pablo that "It's the XYZ coordinates. This is the XYZ..." "Oh, the coordinates?" Pablo clarifies. "Yes, (laughs), I just noticed that," Matéo says. "Yes, I just-" Matéo says, before Pablo utters, "the three-dimensional..." "the three-dimensional graphics, I just noticed it..." Mateo replies. "The XYZ thing," Pablo says. Pablo and Matéo are in the same math class together at Central Marshall Middle School, and this recognition is an example of them socially acknowledging how school-based learning intersects with their self-directed learning interests.

Alex mainly uses Sketch Up to design houses. He learns by exploring and also by watching online tutorial videos. He learns how to create a four-walled structure and add windows and brick facades. His use leads us to having general, if unspecific exchanges about math. At one point, I watch him work and comment, "That's pretty good man, what you have so far, how do you put a roof on it?" He tells me that is what he's trying to get, to get the right angle. I tell him he has to know the degree of the slope of the roof if he's going to do a triangle. Once he adds the

²⁸ This was not a program suggested by Penn's IT staff, nor was it pre-loaded on the iMac terminals. However, I had been aware of it as a Google app before it was acquired by a different company in early 2013 and released as a freeware program, SketchUp Make, designed for home, personal, and educational use.

roof, I ask him about adding eaves, though he is not familiar with the term and we have to look up a Google image to make the connection.

Pablo reported that during a field trip to the local community college he noticed the SketchUp program being used by the theatre department's stage crew for designing sets. When the community college host asked the class if anyone is familiar with the program, Pablo confidently responded it was SketchUp, much to his teacher's surprise.

There are three examples here of how learning is occurring through social practice within the boys' engagement with 3-D CAD program use as a digital literacy skill. First, Matéo recognizes the three dimensional math concepts he originally learned in school and is eager to share the realization with Pablo. My conversations with Alex that relate math concepts to the architecture drawing he is creating also provides the opportunity to learn new vocabulary, deepening his legitimate peripheral participation as a 3-D CAD learner. And last, Pablo is the sole member of his field trip group to recognize the use of Sketch Up in a professional setting, positioning him as possessing a specialized form of digital literacy knowledge among his teacher and peers. Though not broadly taken up as a digital literacy practice, the boys' use of SketchUp provides evidence of interactions in which they are learning in a self-directed manner and also socially making connections between that self-directed learning and their shared formal educational practices.

Emergent Technology Expertise

The previous sections of this chapter described how the boys began the dissertation project with certain forms of extant tech-related practices and how they learned new forms of digital literacy in our community of practice. Here I will provide an account of how the boys continued to develop those skills, which I refer to as emergent expertise. One social aspect of this

development is what Malsbary, Espinoza, and Bales (2016) refer to as “mutual reliance,” or youth simultaneously occupying positions of novice and expert via autonomous learning groups. Mutual reliance is an expansion of ones understanding in a group setting, allowing one to provide assistance to others, while still occasionally requiring assistance oneself. It is another way of understanding legitimate peripheral participation and I apply it in this section as the boys move from peripheral to central participation. Near the end of the study, the boys’ technology expertise is emergent and they are mutually reliant on each other as they begin to question how their skills can be employed, and for what purposes.

Early on in the study it was my intention to position the boys as experts in their areas of interest and therefore support their development as active agents of transformation. This approach is grounded in critical pedagogy. Specifically, Freire’s (1970) contention that people,

develop their power to perceive critically *the way they exist* in the world *with which* and *in which* they find themselves; they come to see the world not as a static reality, but as a reality in process, in transformation. Although the dialectical relations of men with the world exist independently of how these relations are perceived (or whether or not they are perceived at all), it is also true that the form of action men adopt is to a large extent a function of how they perceive themselves in the world (p. 70-71).

The form of action the boys adopted was their continued digital literacy learning, and I tried to reinforce the perception they had of themselves as emergent experts in their chosen fields. One boy in particular, Francisco, did not initially perceive himself in this way, despite his regular participation in the tech room. He often vocalized negative self-talk, showed recalcitrance in engaging in learning outside of his routine, and demonstrated a low threshold for problem-solving.

In order to have Francisco begin to perceive himself as having expertise in a tech-related area, I asked him to give us a demonstration using one of his extant forms of digital literacy practice. Specifically, Francisco had more experience using Microsoft PowerPoint than the other

boys. I asked him to teach us as though, “we (myself and the other participants) were aliens from another planet, and didn’t know how to use a computer.” His comfort with the space and technology lowered his affective filter and he began his lesson that day with a confidence he hadn’t previously displayed. There was a newfound command to his instruction, telling us how to drag and drop an image into PowerPoint, and resize it, and why he was doing things in that way. Some of the boys sat at their own terminals and followed along with his instructions. I made a point of stating several times that Francisco was a PowerPoint expert and no one else in the room had as much experience using it as he did. The point of this example is that each boy possessed a form of emergent expertise that was unique within our group. In Francisco’s case it was necessary to remind him of how well he knew PowerPoint. Later, he integrated this perception of himself as mutually reliant, and confidently instructed others in his digital art area of expertise.

During the final interviews the boys also self-reported about how they felt their technological practices had evolved in relation to their motivations. Francisco mentioned enjoyment, despite working through difficulties in the learning process, “Well, what I enjoyed the most is like when we were all working, we were all learning new stuff, like, Dante and Pablo were learning new stuff about Code Academy, or they kept passing it (finishing lessons and earning badges). And how much I started learning or knowing new stuff from Adobe Illustrator, like when I found out 'wing' (a specific tool), and we tried to color it inside, there was a spraypaint (another tool) and you could spray the white stuff out...” Although Francisco mentions the enjoyment of ‘learning or knowing new stuff,’ he also acknowledges the difficulty of it, “The most difficult was for me, the most difficult was when, um, when like, when like we learned new stuff, and it was like really hard to compare of (sic) what I learned already, like when you learn something new and you don't know how it works, and it's really hard and you just keep trying and trying.” My contention is that in Francisco’s first statement becoming proficient with

certain tools contributed to his enjoyment, while in the second statement about difficulty he alluding to the effort required for continued engagement with a program or tool, ‘when you learn something new and you don’t know how it works.’

Coding Expertise

The boys used Scratch (scratch.mit.edu) the first few weeks of the study as an introduction to coding before quickly moving on to the Code Academy website. While all of the boys opened Code Academy accounts, only four had sustained practice with coding, and only two devoted themselves fully to their Code Academy practice, beginning with HTML and branching out to learning other programming languages. The other boys chose to pursue graphic design/digital art or 3-D drafting practices. I will describe two patterns related to Pablo and Dante’s emergent coding expertise here, their approaches to learning coding and their motivation for continuing to develop their coding skills.

Pablo and Dante took different approaches to their self-directed coding. Pablo’s self-directed learning was more ordered and linear. He worked on the HTML module before moving on to the CSS module, and only explored a new computer programming language after completing all, or nearly all, of the previous lessons. Dante’s self-directed learning was more exploratory in nature. Over the course of the study he practiced HTML, CSS, PHP, JavaScript, Python, Ruby, and Parse. He spent most of this time on the first three, and only cursorily explored the other four. Pablo observed that Dante was, “jumping around” on Code Academy. In one session Dante asks Pablo about his HTML lessons, “Is that the only thing you’ve been working on?” Pablo responds by telling him, “Well you just bounce around, I stay concentrated on one thing.” Despite their different approaches, the two often collaborated and competed with one another.

It appeared that Pablo's motivation for developing this coding ability was to work on front-end material like a webpage. After spending several sessions working on HTML lessons, he asked me about the real-world applications. We discussed using HTML to create web pages, and over the next several months he occasionally explored website creation platforms like *Tumblr*, *Weebly*, and *WordPress*. His main difficulty in scaffolding from discrete Code Academy lessons to creating his own website was his indecision in what content to create. Despite conversations I had with him about creating a narrative, and describing the storyboarding process to him so that he may begin to think about how he would like to design and present his own interests on a webpage, he returned to completing Code Academy lessons in the same ordered fashion. In other words, he developed expertise in how to correctly write lines of code, but lacked a sense of what content to put in between the lines of code.

Dante's motivation was to become proficient at many programming languages, without being concerned about their application. Wide-ranging mastery was important to Dante. And, he reported that completing the whole lessons was the most enjoyable aspect about learning coding, "Cause then you can learn that and do more stuff," Dante tells me. In this sense Dante is more interested in the 'back-end' programming, and is less motivated in creating a visible product than in learning to do more.

These differing motivations may explain the boys' varying approaches to learning coding, and how their expertise development took distinct paths. However, Pablo and Dante still came to see themselves as having a degree of expertise based on their completion rates of Code Academy lessons, and were competitive about earning completion 'badges'. They were both motivated by the percentages of module progress and often voiced percentage complete to the

others. They responded enthusiastically to these achievements and they served as a source of continued engagement in learning.

Digital Art Expertise

While Pablo and Dante earned Code Academy lesson completion badges, Francisco and Matéo, and Leo developed expertise in Adobe Illustrator to create digital art. They all gained varying degrees of mastery with the program, and also incorporated other programs like PowerPoint, Word, Preview, and Photoshop into their practice. Here I focus on Francisco's emergent expertise, how he functioned as a mutually reliant member of our community of practice, and became our digital art expert. Early in the study Francisco states, "I don't know, I just don't feel like I'm good, I mean, I'm good at drawing, but I'm not good at drawing with computers. I'm just hoping I get to learn how to use Illustrator 'cause- I told Oscar (the community center director) about my Illustrator, he said I would be perfect to do, to teach the kids one day." Based on this statement I can infer that Francisco is considering his potential mastery of the software as a mediating factor in shifting from a tech room attendee to someone who can share his skill set in the future. In a community of practice sense, he understands he must move from the periphery of digital art practice to a more central role.

There are several instances where Francisco makes this transition. As previously mentioned, he instructs Matéo on how to use Adobe Illustrator, this is important because Francisco is a seventh-grader and Matéo is an eighth-grader, and Francisco has the opportunity to use his expertise to show an older boy whom he didn't know before how to use his program of choice. Francisco calls out, "Carlos, Carlos, you want me to show him the way you showed me?" Francisco is at Matéo's terminal, typing in the Adobe TV web address for the video tutorial that he's written down in his notebook. He switches into teacher mode and tells Matéo, "Alright man, I want you to watch this video and I want you to understand what they're saying..." I tell Matéo

that Francisco got to point where he was drawing leaves and plants. The audio recordings reveal Francisco helping Matéo for several minutes in the background.

Francisco also communicates the aspect of difficulty when learning “new stuff”. Late in the spring, as I am looking on at the work Francisco is doing and he shows me how to move between the paintbrush and eraser, and says, “It's hard.” He asks if it just wouldn't be easier to draw by hand, I tell him some people do, but that at some point he's going to have to learn software. “Yeah, that's true,” he responds. A few minutes later, in the process of trying to resolve a problem he incurred, he manipulated the image and learned something new. “I don't know what I did. It just happened all of a sudden, I have no idea what just happened,” Francisco repeats, and I can hear the wonderment in his voice, this is a breakthrough, and he's in the process of coming to terms with *how* it happened, he is trying to come to terms with his own agency. “Oh, I did it again”, he says. This time he exclaims it more plainly. He has repeated the concrete steps. “Oh, I think it's because I used this,” Francisco begins to reason out his agency, using a specific tool. “See dude, you solved it yourself, that's gotta make you feel pretty good.” Here I am attempting to explicitly make Francisco aware of his emergent expertise. “I don't know, I just feel kinda special,” Francisco says in a hushed tone. Francisco had learned how to use the *fill and stroke* function in Illustrator. “You're doing a good job Francisco,” I say. “I know, right?!” he responds, pleased with the progress he's making on Illustrator today. I encourage the other boys to come look at his drawing.

In the final interview, Francisco summarizes his feelings about his use of Illustrator and his time in the tech room:

Francisco: I started getting interested in Adobe Illustrator, of how I could draw on the computer instead of, like, real life.

Me: So then, knowing that, when you started in the tech room, did you think of yourself as being good at technology?

Francisco: No. I just kept thinking, I just kept saying, like I was nervous.

Me: OK, so why do you think you were nervous? What made you nervous?

Francisco: I didn't know nobody there, or I was going to have, maybe, a hard time making friends with them.

His social anxiety was his primary concern in the beginning, but the examples provided in this section suggest he was pleased with his progress using Adobe Illustrator and was a mutually reliant member of our community. He moved from the periphery to a socially central role offering his expertise and instructing other boys. What had changed, to paraphrase Freire, was Francisco's perception of the way he existed in the tech room, from being socially anxious to a socially engaged emergent expert of digital art.

Drafting Expertise

While Pablo and Dante were motivated by gaining command of coding languages in different ways, and Francisco's perception of himself changed from novice to emergent expert, Alex's interest in computer-aided drafting occurred after he initially explored iMovie. He describes, "I feel when that happened, I really didn't like it when that happened (not being interested in iMovie). I only liked it if it was kind of fun, and when I messed around with it (iMovie), it wasn't. But when I just messed around with Sketch Up, it actually turned out to be real fun, like you can actually make all kinds of things, and all that... I learned a lot there at the tech room." In this way Alex's motivation was distinct from that of the other boys, his primary concern wasn't gaining a degree of mastery, or gaining competence in order to serve a more central role in the tech room, but having fun with the program he was using.

I observed him working in SketchUp one day and ask, "How are you learning all of this stuff?" "Like you said, mess around with it," he answers. "That's pretty cool, Alex, some 3-D drafting" I respond. I ask him if he has ever heard of AutoCAD, the professional program and he says no. Alex spends most of his time designing buildings. About midway through the study Alex

begins looking up what others have created using SketchUp and says, “Wow, I think I gotta get better at this, Carlos, I think I gotta get better at this, 'cause I'm just getting beat.” Alex’s enthusiasm for the program convinces Pablo to self-direct toward it for a session and he asks for Alex’s help to make his roof bigger. Later that session I observe Alex looking at the Professional edition of SketchUp. He tells me it costs 700 dollars. In the late spring, I watch as Alex applies a brick facade to a structure he is drafting. We talk for a moment about the symmetry and proportion of the windows and the doors as he draws. Alex reiterates his breakthrough about the brick facade with me, even though it occurred a few minutes earlier, he wants me to know what he has learned.

Near the end of the study, Alex powers on his terminal and does not immediately see the SketchUp icon on his desktop. “Oh my God, I was about to say MY SketchUp was not here...” as he finds it. This utterance of “my” indicates ownership and a sense of his autonomous learning practices. To work on SketchUp in the tech room is what Alex does. He soon finds the program and begins to work, showing me what he has done and what he’d like to do. Alex’s continued engagement and emergent expertise in SketchUp began because he found the program entertaining, then once he discovered projects that others had completed, he became motivated by the competition and sought out the professional edition of the software. Later he introduced Pablo to the program and they connected school-based math lessons to the program. And finally, we see that he has an engaged relationship with the program, claiming it as his own.

Extension Expertise Practices

As the boys developed their proficiency in the programs of their choosing, they also extended those practices beyond those programs. There are instances where they take up new or unfamiliar practices as part of their digital literacy learning. Pablo arrives with a thumb drive one day and tells me he has a Microsoft Publisher file on it. His aunt has asked for Pablo’s help

retrieving the file that is a flyer for his church. She has given it to him to bring to the tech room hoping he can fix it. His aunt also asks for his help a few weeks later installing anti-virus software on her Windows 8 computer. Even though he is not able to fix the problem without the Publisher program, he is now being asked to undertake such tasks by a family member, an acknowledgement of his emergent technological expertise outside of our community of practice.

During the second half of the dissertation project, Pablo begins browsing online for various hardware like laptops and iPods and asking me questions about the relative cost. He knows of a local retailer that sells used Apple products at a reduced rate. We spend time talking about the various generations of hardware, comparing versions of the laptops, and how memory and processor speed can increase the cost. We also spend a few minutes looking at the products online and I show him how to 'build' a custom laptop on the Apple website. His emergent technological expertise with coding is beginning to branch out into other areas, and this conversation is an indication that he is interested in investing in his digital literacy practices.

A few sessions later Pablo tells me his family had leased a Mac laptop from the local Rent-a-Center but returned it because the headphone jack didn't work, and that "it had some other problems." He tells me they are going to fix it and he is going to get a new one. Alex joins the conversation to tell me that his family's laptop has stopped working. When powered on the screen simply reads, "no data found". These problems of securing reliable and up-to-date machines at home, along with the increased use of mobile devices, foreshadow a stark realization. That is, as the boy's expertise emerges and their technological interests expand, they come up against a lack of resources needed to support them in continuing to develop their expertise and maintain their interests. What is the point of having a laptop or desktop computer and paying what might be thousands of dollars for it, when nearly everything can be easily performed on a mobile device

like a smartphone? More affluent families may have smartphones, but they also have laptops and/or tablets. Websites aren't always optimized for mobile viewing and interaction. And more intellectually intensive practices like writing an academic paper or studying for standardized tests are normally not completed on smartphones, not to mention the coding, design and drafting practices the boys are learning in the tech room are all being completed on desktop computers.

An Analysis of Digital Literacy Learning as Social Practice

In the above descriptions of how the boys developed domains of digital literacy skills, we see that the primary factor that initiated their learning process was the value that they perceived certain practices to have. Through their extant gaming practices, they became familiar with the concept of hacking. This led to their interest in learning coding. However, only two of the boys maintained a continuous practice of coding throughout the study. For others it was their extant interest in creating art by hand that led to their sustained practice with digital art and graphic design programs. Still others shifted that interest in drawing to creating 3-D drafting sketches. In this section I analyze how our collaborative learning practices provide for a more fine-grained understanding of participant positionality in communities of practice, digital literacy problem-solving and its limits within our community of practice, and how the third space learning environment we created in the tech room served as a node of connected learning that articulated from the third space of the community center tech room to the school, home, and surroundings.

After the first few weeks we began to settle into a sort of rhythm. I would arrive at the tech room a few minutes before noon to unlock the front door and turn on the air conditioner to air out the stuffy room. I never went to the trouble of turning on the terminals - leaving the boys the responsibility of managing their own equipment. Francisco excelled at this, having previously

spent time at the community center's after-school program²⁹. Often without prompting he would remind others of wireless keyboards or mice left on or unsynced with their respective terminal. The boys also developed a greater sense of collaboration and autonomy. Rather than asking me for help immediately, they would attempt to solve a problem themselves or consult with one another. Over the course of the dissertation project the boys and I were able to develop a community of practice through a deeply social process, as they acquired digital literacy skills. Here I describe the processes that occurred in relation to the technical pursuits discussed earlier.

Learning from and with Participants

In forming this community of practice, I was initially positioned as more experienced in tech-based learning. As the boys learned from me and each other they became more proficient at their chosen digital literacy skill sets. This is an expected development in communities of practice-based master-novice learning approaches (Lave, 2011). However, less frequently attended to is how the social nature of communities of practice enables more experienced participants to learn from their less experienced counterparts. As an anthropologist researching the lived experiences and informal learning practices of young Latino men, my goal and expectation was to learn about the boys' daily lived experiences. What was unexpected, however, is that by engaging with them in this community of practice and situated learning, I would also learn from them in ways that would enhance my digital literacy skill set. Or more specifically, as each member developed their own digital literacy specialization, the role of (emergent) expert shifted from person to person. This suggests that learning within communities of practices can occur hierarchically (master-novice) and laterally (participant/observer-participant) at the same

²⁹ Twice weekly in the afternoon the community center would open and one or two local college students would volunteer to help K-8 children with homework. Francisco parents required his attendance in the after-school homework help hours after his math teacher told them he was failing. He had attended the community center for 5-6 months prior to the beginning of the dissertation project.

time. This also adheres to a perspective of mutual reliance. However, this is not to imply that power relations also equalized or became less hierarchical. As mentioned above, as the researcher, the coordinator, and as an adult, my power was embedded within the structure of the project. I continued to direct, however collaboratively, the learning process: there were times when I explicitly instructed the boys, other times I suggested they change activities, and times when I redirected their behavior much as a classroom teacher would.

Yet, that said, an important factor in how the boys acquired digital literacy skills was the relational nature of learning between myself and the boys. As stated earlier, I have only a small degree of experience with the computer programs the boys were learning, and in the context of the community center tech room I did not consider myself a teacher, but a coordinator of the boys self-directed digital literacy learning activities. In fact, there were instances in which my lack of expertise in certain domains allowed me to become a co-learner with the boys. As mentioned in the introduction of this chapter, this is an important aspect of the research design because I was not trying to recreate a school classroom learning environment, but rather a third space that allowed for a fuller emergence of the boys' expertise and autonomy as we learned together.

In this way, my position relative to the boys was akin to what Lave and Wenger refer to as, "journeyfolk, not yet masters, are relative old timers with respect to the newcomers" (1991, p. 57). This is one instance in the community of practice literature that complicates the master-novice, or teacher-student binary present in more typical learning studies and provides a richer field for analysis when these gradations of expertise are recognized. A case could be made that our levels of expertise were even closer than the journeyfolk-newcomer relation. My extant coding skills at the beginning of the study consisted of having taken a summer enrichment course in HTML coding a decade prior with no practice in the interim. And I had virtually no experience

with the other programs the boys explored.

Since the boys had come to digital literacy practices through their interest in gaming, I was wary of the degree to which I was being prescriptive about what and how they learned. I understood that by observing and participating with them, and having procured the space, time, and solicited IT experts regarding programs accessible to their age level that I had designed the foundation of this experience for them. But I was also aware of transmission of knowledge or “banking” models of education (Freire, 1970) that reinforced the dyadic models of learning and their unequal power relations. In the first month of the study I wrote a memo to myself noting my attempt to “dissolve the student-teacher binary by engaging in some of the same activities as the boys. Part of the motivation was that I wanted to feel the frustration and unfamiliarity they experienced as they tried a new program (Scratch) for the first time. This is also part of a reflexive methodology. Here I’m also trying to dislodge myself as an ‘expert’ and model a different style of interaction for the boys. The question is, what am I modeling?” (June 26, 2013, Coordinator as Participant Memo).

A month later, Dante was giving our group of learners an expert demonstration of his Nintendo Wii gaming console. Again I reflected on traditional teacher and student roles, “Re: Student Expertise,” I wrote, “Part of the practice of student expertise is related to the inversion of traditional student-teacher (unidirectional authority) roles. In this case I am giving Dante explicit instructions on how to give me/us explicit instructions on his area of expertise (gaming/Wii), ‘as if you’re explaining it to someone from another country, who is using it for the first time.’” (July 31, 2013, Traditional Role Inversion Memo).

That first month of the project my fieldnotes describe the egalitarian nature of the learning process that was already taking form. “I’m not familiar with Scratch, and I’m learning by

watching the boys.” The notion of exploration in digital programming was unfamiliar to the boys. So, as I sat at one of the free terminals and created a Scratch account to introduce myself to the program, I was also able to model exploration with some of the boys intermittently looking on.

As we all sat together learning Scratch, a situation of co-learning (Rheingold, 2014) was created. The boys had begun learning before me and hence modeled for me the essential functions of the Scratch platform. I would mimic some of the commands they employed with their avatar or “sprite”, then I would try a command they had not used. When I executed it along with “blocks” of other commands I was sure to vocalize my success. When I was unsuccessful in executing a new command, I would vocally share that as well. This motivated a couple of the boys to help me solve a problem I incurred. This interaction supports how the relationship between myself and the boys was diverse. It was not a hierarchical master-apprentice model, which often comes to mind when thinking of communities of practice studies. It also provides grounding for further studies that may employ a communities of practice approach in a third space with non-dominant (Gutiérrez, Morales, & Martinez 2009) learners. The distinction being that the disruption of the binary learning relationships provides opportunities for autonomy and empowerment of the learners.

The relational nature of learning with the boys shifted when it came to certain problems they had difficulty solving. My role as coordinator pivoted to assisting with various problem-solving processes when the boys were not able to progress in a self-directed or collaborative nature. In one such session, the boys are learning HTML using Code Academy:

Dante calls me over to help Pablo with a-tags for links. I read the instructions in a hushed voice and tell them, “To me the most important part of that line,” as I take control of the mouse to highlight a line of the instructions, “is the stuff in here (referring to a part of a line of code) in this first tag. That is what links to this

right here, so um, this is that first part of that a-tag... and that href points to it..."

In this moment, I was helping the boys solve the problem by modeling a close reading of the instructions and indexing the specific text that provides a solution. In the process of my reading in order to learn so that I could model, I did not explicitly instruct them, rather, they observed me as I learned about a-tags.

I model this type of simultaneous close reading and learning in order to problem solve again with Pablo when he asked for help:

I review his code and find an extra space in one line. Pablo acknowledges that he wrote the extra space and that it probably doesn't need to be there. "If you pay attention and write good code," I continue, "that first line of good code, then you can just copy it and use it." Pablo reworks his code, line by line, and I ask him if he can see how it looks different. "I was doing it right..." he says. But then I remind him he needs to delete an extra space again. "This is cool, man," I tell him, "because you just learned some problem-solving skills, right? Like two heads are better than one and all that stuff." He saves and submits the code successfully.

Yet other times when I tried to problem-solve with the boys, it became a difficult learning challenge. As when I spent half an hour on the terminal next to Francisco trying to import YouTube videos into iMovie, with no success:

I felt like I was modeling perseverance and told him, "See, you know the toughest part about learning computer stuff, is that the very first time you do it, it takes a really long time... but then once you learn it once, then you get faster and faster and better and better at it."

At that moment I was attempting to put into words what he was observing me doing. Then about 10 minutes later, I shared with him my thought process as I tried to solve a problem-solve by following the instructions step-by-step. In the end I could not solve the YouTube to iMovie video transfer problem we worked on for over an hour. Another time, Leo and I go through a similar ordeal as he learns Adobe Illustrator:

I tell him, "Here's the thing, right? I'm not an expert in any of these programs, but I'm pretty good at solving problems. So I may not immediately know, like what it is, like what the steps are, but it can't be that hard to figure it out, right?" I then

continue the process, giving him various options to begin working to import his image into Illustrator. He says, "I could click 'Open'". "No, I mean, hell, try it," I tell him, "This is how you solve problems, right?"

In my successes and failures to solve problems with the boys, I was positioned as a coordinator and co-learner. I was engaging in legitimate peripheral participation when I sat alongside the boys and experienced the discomfort of beginning a new learning activity. LPP was also involved later, when I demonstrated line-by-line close reading of the coding instructions, vocalizing my thought-processes and summarizing the steps. The boys learned that in the tech room, they weren't expected to be experts (immediately), or high-achievers in the scholastic aptitude sense. I attempted to model the learning behaviors I hoped they would practice: a willingness to try new modes and media of learning, an understanding that they were developing problem-solving skills as part of their digital literacy practices, reassurance that their proficiency would increase despite initial failures, and an openness to attempt new approaches to solving problems when previous methods had failed. In a community of practice model, I had a few more gradations in expertise of overcoming failure than the boys. Of course, not all the failures we encountered could be overcome within the context of our small and limited community of practice.

In the final couple of months of the dissertation project, I begin to approach the threshold of my understanding of Pablo's evolving coding practices. I tell him it's getting harder for me because I haven't done the previous lessons, essentially the degree of difficulty is increasing. I notice that he is learning CSS, an entirely different language than HTML. At this point I could no longer solve the problems through a close reading of the instructions, and could only recommend that Pablo search for an online community space, like a bulletin board or forum, to ask his questions and hope someone else was familiar with the issue. Because his level of expertise in coding had developed beyond my own, these online forums were effectively other communities

of practice, where he could reach out to more experienced coders. My role in these instances was minimized, but since I never inhabited a formal 'teacher' role, this aligned with their more self-directed, autonomous learning practices.

Connected Learning Across Spaces

Another pattern that becomes apparent in the boys' participation in the dissertation project is that they connect school, home, and community-based knowledges to the third space of the tech room and vice versa. Ito, et al. (2013), describe connected learning as a framework for understanding how a learner integrates knowledge from various environments in a self-directed manner to fulfill personal learning goals. Connected learning is especially known for advocating for the use of new media to create more equitable opportunities for non-dominant learners.

The first set of examples is how the boys connect their extant digital literacy practices to the new practices in the tech room. The boys with mobile devices communicated via messaging apps previous to the study. Once they created email accounts and became accustomed to using them, they integrated email as one of their communication media. Another example is how Alex and Dante were eager to share their e-sports and role-playing game experience, with the rest of us in the tech room. The latitude in acknowledging many forms of learning as valid provided a discursive opening for sharing in the third space of the tech room. It was only my own limited understanding of e-sports that prevented Alex from furthering his connected learning.

In another set of examples, it is evident that the boys are making connections from their school-based learning to their new digital literacy experiences in the tech room. When we first create email accounts and are able to access the suite of Google apps, including Google Drive and Google Docs, the boys are quick to recognize them as tools used by one of their teacher to have their class complete a project. This appeared to legitimize the learning practices of the tech room

for those boys. They also understand the Cartesian plane math necessary to move the sprites in the Scratch coding program. And related, the boys recognize the three dimensional drafting interface of SketchUp as connected to the math class lessons that describe x,y,z coordinates.

And finally, there is the connection of the tech room based learning practices to the world when we read and discuss current articles on important coding languages to learn, the benefits of thinking like a coder, and consider how one might design a webpage to attract more visitors. Additionally, Pablo's teacher and peers are surprised by his ability to recognize and connect the SketchUp program being used at the local community college during a field trip with the program used in his digital literacy community of practice outside of school.

Conclusion

At the beginning of this chapter I set out to answer three questions: In a third space setting, how do Latino middle school boys learn digital literacy skills while collaborating as a community of practice? How do the boys' extant digital literacy practices enable participation in a community of practice to develop new digital literacy skills? And how do the positionalities of the researcher and the participants enable learners to take up new practices as domains of emergent expertise? I will conclude this chapter by summarizing the salient points that address these questions.

First, as I've depicted, the boys arrived at the tech room with their own developed sets of digital literacy skills and had previously participated in various communities of practice centered around these skills. Wenger-Trayner, Fenton-O'Creevy, Hutchinson, Kubiak, and Wenger-Trayner (2015) describe how participation in multiple communities of practices by an individual creates a complex landscape of practice. So, we find that the community center tech room served as a point in this landscape. It is a point on that landscape that allowed the boys to learn (via

resources unavailable to them in the school and home) and socialize (with less structured time and less stringent behavioral policies than in school) in a newly formed community of practice that contributed to their self-directed interests in digital literacy learning. We also find that their individual interests created a community of practice where each person's skill set is valued because when shared, it enhances the skill sets of the others.

The boys' extant digital literacy practices provided a degree of familiarity when integrated into the tech room setting. Legitimate peripheral participation occurs when the boys apply the practices they use with gaming console and mobile devices to the hardware, software, and interfaces found in the tech room. Further, they connect other extant practices found in the school, home, and community settings with the practices in the tech room.

And, because the research design privileged a coordinator-participant model of learning interaction over a traditional teacher-student model, the boys were able to position themselves as developing emergent forms of expertise in a generative, rather than transferable form. I co-learned with the boys, they instructed me at certain points and I was able to model close reading and problem-solving methods when self-direction and collaborating among themselves failed to render a solution. There were also instances when I was unable to appreciate, as in the case of Alex's e-sports interest, or solve, as with Pablo's CSS coding questions, certain issues. This set boundaries on what our tech room community of practice was capable of achieving. However, considering its place as a node of connected learning and a point in a landscape of practice, it allowed the boys to establish a new set of digital literacy skills as well as identities as learners who could continue to develop their skills in other communities of practice within their larger landscape of practice.

CHAPTER 6: Identity Development through Learning and Socializing in a Community of Practice

Carlos (coordinator): “What’s the cursor? Where does it need to be?”

Francisco (participant): “I don’t know! I don’t do smart!”

Carlos: “You are smart, you’re here right now!”

Francisco: “I know, but I don’t do computer smart.”

This exchange between myself and Francisco during the first two weeks of working together in the tech room illustrates a type of response that was common among the boys as they began learning computer-related tasks. Often during the first few weeks, when one of the boys would engage in a digital activity and incur some type of difficulty, he would voice frustration and attribute his difficulty to a personal deficit. When Francisco expressed this frustration he was exploring Code Academy, a web-based program composed of lessons on HTML programming, a computer language used for web design. Just prior to this exchange, he had motioned to me for help. Although Francisco had worked on computers in school, he did not yet know that the word *cursor* in the program’s instructions referred to the moving on-screen arrow controlled with the mouse.

Francisco’s response to my question, however, does not simply reference his lack of knowledge. He positions himself as someone who does not “do smart.” His words index “smart,” not as an internal aptitude or state of being, but rather an activity or practice that is performed by those who, he implies, “do” in order to come to know. When I push back, reframing “smart” as his state of being present in the room and engaged in practice, he further qualifies that by “smart” in this instance he means “computer smart” – a specific, technologically-related identity one performs. Because he lacked the learning experience to provide him with the specialized vocabulary to connect the word *cursor* to the object it indexed, he internalized this lack of

experience as a negative aspect of his identity—he saw himself as someone who didn’t “do computer smart.”

This interaction, like many I had with the boys in the early stage of the project, points to the critical importance of identity, and identity development in acts of learning. The previous chapter addressed how the boys practiced and learned discrete digital literacy skills together. This chapter considers how the boys’ social practices, particularly cultural and linguistic practices, their discourses about masculinity, and their group membership influenced how they developed identities as digital literacy learners. I argue that for boys like Francisco, learning in a community of practice—in this case working with a coordinator and a group of peers while learning a technologically specialized skill set—led to the development of a sense of themselves as learners that challenged an initial negative self-conception as a person who doesn’t “do smart.”

I first outline the concepts of models of identity (Wortham, 2006) and identity in practice (Wenger, 1998). Then I apply them to examples of how the boys participated in activities that related to their identity formation. The first activities I describe, enacted cultural values and manual labor practices, take into account how the funds of knowledge (Moll, Amanti, Gonzalez, 2005) and moral education (Villenas, 1996) the boys acquire as learners in their home and community settings prepare them to participate in a digital literacy community of practice in the tech room. In the following section I provide examples of the ideologies about language, race, and masculinity the boys share that are central to identity formation. I also attend to how individual and group learning processes included familiarity, collaboration, and competition among the boys. This provided opportunities for them to develop as competent and enthusiastic social learners and strengthened social bonds with their peers.

The process that I delineate in this chapter is analogous to the learning trajectories

described in the previous chapter. As the boys became more proficient in their chosen digital literacy skill over the course of the study, they also became more proficient in the social practice of learning together. The ethnographic data show that the boys began by voicing uncertainty about their abilities, but over time began to recognize their own, and each other's assets. This resulted in the recognition that they themselves and the other members of their community of practice had successfully become proficient in specialized digital literacy skill sets. This in turn, I argue, enhanced and broadened their sense of themselves as young Latino males.

Specifically, I analyze the patterns of communication and interactions within the community of practice that developed over the course of the dissertation project. I apply Wortham's formulation of models of identity and Wenger's identity in practice in analyzing these interactions to address the following questions: How do these young Latino males draw from previously acquired cultural values and learning practices as they engage in learning within the digital literacy community of practice? How do they negotiate their identities relative to discourses of language, race, and masculinity? And, what pertinent social processes shape their emerging sense of themselves as digital literacy experts and members of a group of learners?

Several of the boys reported that participating in the study, that is, attending weekly session with their peers and being able to self-direct their digital-literacy related learning practices, allowed them to interact in ways that were generally not possible at school. They often spoke of their time in school as highly regimented and how this limited their ability to socialize with one another. Further, many of the boys reported that they seldom interacted with classmates and peers outside of school. Thus, the time in the tech room became a valuable social space for them. The boys frequently noted ways their time in the tech room was unique, and how their learning was less regulated than in school. In addition to learning technology skills, the freedom

to socialize as a part of learning within this community of practice also supported their continued development of social and communication skills.

To become, is to move along a trajectory, accumulating experience, knowledge, and skills while participating in society. And, to belong is to enter into a community of practice as a beginner, and simultaneously develop the autonomy and interdependence necessary to direct one's learning practices in a group setting. Belonging in this way, I argue, provides a foundation for boys like Francisco to engage in learning practices that over time shift their sense of self from "I don't do computer smart" to that of being competent and enthusiastic digital literacy learners.

Models of Identity and Identities in Practice

In exploring how social identity formation occurred in the tech room, I argue that the boys first arrived with sets of cultural values and learning practices acquired in their homes and community environments. Central to these values were beliefs and normative expectations concerning hard work, respect, "appropriate" Spanish and English language use, ideal expressions of masculinity, as well as racialized understandings of their identities as Latinos. Their views on language, race, and gender were frequently topics of conversation in the tech room and the boys reported that they were generally unable to discuss these issues at home and in school. This open conversation and the reflection it entailed, I argue, provided opportunities for the boys to re-imagine their conceptions of themselves and what it meant to be a successful learner.

Stanton Wortham's (2006) work on the interrelation between social identification and academic learning provides valuable insights into how individual learners come to understand themselves over time through series of speech events within educational contexts. Wortham contrasts how and describes why students may begin to take up behaviors associated with, in the case of his study, "promising girls and unpromising boys" (p. 52, 2006). Conversely, he

documents instances in which the social circumstances in the classroom upend these stereotypes, for example, when a female student is academically marginalized, and a male student idealized for his contributions.

Wortham's conceptualization of models of identity is important and provides a strong analytical lens for several reasons. First, he connects speech events that regularly occur over an academic year to models of identity and processes of identity formation in classrooms and learning contexts more generally. Second, he rejects overly simplistic macro/micro formulations, such as structure vs. agency, and instead recognizes the value of attending to practice over time to document (trans)formations. He draws upon practice theory to, "explore processes through which relevant models of identity are actually applied in context" (2006, p. 43) and explains how this is directly connected to theories of situated learning (Lave & Wenger, 1991) and communities of practice (Wenger, 1998).

This brings me to a second key concept I will use in analyzing identity formation among the boys in the tech room. I will apply the community of practice framework and specifically Wenger's (1998) development of this concept to understanding identity as "an integral aspect of a social theory of learning" (p. 145). In this view, both individual and community identities are constantly shaped by the experiences of the individual and how these experiences are interpreted socially. Wenger's systematic exploration of identity formation in a community setting is a strong analytical complement to Wortham's conceptualization of models of identity. Where Wortham's is concerned largely with academic learning in a school classroom, Wenger's focuses on learning across a range of contexts in social practice engaged in as members of a community, broadly defined. This, I argue, provides an additional dimension of non-institutionally related learning that is particularly well-suited to examining how the boys' understanding of themselves and our

community in tech room evolved over time.

Taken together, Wortham's models of identity and Wenger's identities in practice are concepts that each pivot between the individual and the social. The former conceptualizes identity formation by analyzing speech events over time and the latter theorizes a constant reconfiguration of individual and community identities in and across varied learning contexts. For Wortham, the models he describes are "*lived* and *enacted*, as well as represented (*italics his*)" (p. 33, 2006). Wenger also understands that membership in a community of practice requires the negotiation of meaning through one's lived experiences. Before moving on, I will first briefly explain the specific aspects of each concept that are most directly relevant to and productively applied in my analysis.

Models of Identity

Wortham describes a model of identity as, "either an explicit account of what some people are like, or a tacit account that analysts can infer based on people's systematic behavior toward others" (p. 6, 2006). Metapragmatic models, in turn, are those "that specify characteristic types of people, actions, and relationships" (p. 36, 2006). He traces the origins of scholarly work on such models to Hacking (1990) and Foucault (1971; 1977) and the analyses they provide of emergent models of personhood from pre-Industrial era Europe to contemporary European societies, processes they track over centuries or sociohistorical epochs (p. 7-8, 2006). The salient point in their work, Wortham argues, is that an application of normative classifications that began in institutional settings such as church and government over time became widespread and were internalized by individuals.

Drawing upon Foucault, Wortham describes how, as institutional learning settings, schools began classifying students in ways that are still practiced today, "in grading practices, in

disciplinary procedures, in the spatial arrangement of students in classrooms...” (2006, p. 7).

Wortham draws upon this formulation to explore how models of identity can be imposed upon students who then may or may not take up these classifications as parts of their identity in other contexts. For example, a teacher in characterizing students to their parents may identify one sibling as “book smart” and the other as “street smart” based on one’s high standardized test scores and the other’s lack of adherence to classroom behavior norms. These parents may adopt these labels and deploy them in the home. The siblings in turn may align their behavior and interests with these characterizations and begin enacting “promising” and “deviant” models respectively based on institutional assessments.

He also describes the importance of recognizing timescales (Lemke, 2000), or the various intervals at which human processes take place. While sociohistorical epochs transform society over centuries, the participant examples Wortham analyzes occur within minutes. His contention is that event-level work like specific speech events, when contextualized and studied as a series of connected interactions can illuminate how metapragmatic models of identity are imposed upon and possibly taken up and enacted by individuals.

With this in mind, one can focus on the nature of these metapragmatic models of identity and how they may change. Wortham notes that metapragmatic models can change over timescales and contexts, or time and space. He cites the anthropological concept of “circulation” (Urban, 1996; 2001) and applies it to social identification to suggest that over time metapragmatic models move within and between various social contexts and are transformed, reproduced, or replaced. The circulation of these models, he suggests, can be understood as trajectories that move from publicly circulating models of identity at a sociohistorical timescale to a model enacted locally at an event-level timescale, as is the case with specific speech events. Models in turn may change

depending on the participants' mutual understanding of the model and how it is imposed or enacted by an individual. Additionally, practices taken up at the local level can feed back into more widely circulating models, thereby transforming them.

However, assuming a binary distinction between sociohistorical and event-level timescales and publicly circulating and local contextualized models, Wortham argues, can be misleading. Models of social identification have trajectories and therefore move across several layers of time and between spaces. For this reason, Wortham suggests moving beyond conceptions of macro and micro and focusing instead on the social practices of individuals and their interactions with metapragmatic models of identity. He cites the work of Holland and Lave (2001) and Lave and Wenger (1991) as advocating for practice theory as a lens for analyzing trajectories of social identification for individuals. These trajectories are not unilaterally projected from publicly circulating models of identity to the locally enacted or reproduced models. Rather they are contested at many levels, across decades and speech events. In fact, in Wortham's estimation, practice,

must be understood to mean the configuration of resources from relevant timescales that come together to establish identification in a given case, (and)... must also attend to component processes at various timescales, with different focal phenomena demanding that we pay attention to different configurations of resources (p. 43, 2006).

Therefore, practice is not confined to any particular timescale, nor to any one spatial setting. The social practice of identity formation modulating between metapragmatic models and individual enactment is a complex, iterative, and continual process.

The models of identity, the attention to specific speech events, and the application of practice theory that Wortham puts forward in his work provide a conceptual foundation for analyzing the boy's social practice in the tech room. How they talk about themselves in relation to learning has a specific trajectory over the duration of the dissertation project. They index widely

circulating metapragmatic models along the course of their individual trajectories, contrast their own identity formation with these models in the context of tech room discussions and interactions with digital media, and form group social practices that crystallize these individual identity formations. I will draw from a second conceptual framework of “identities in practice”, taken from Wenger’s (1998) *Communities of Practice*, to illuminate the interrelation between group social practices and individual identity formation.

Identities in Practice

The concept of communities of practice is first developed in the work of Lave & Wenger (1991) as they explain what they refer to as situated learning. Wenger (1998) expands the concept of communities in practice and focuses on developing a social theory of learning that takes incorporates theories of social practice and identity formation where identity is framed as, “a way of talking about how learning changes who we are and creates personal histories of becoming in the context of our communities” (p. 5). A communities of practice approach to explaining learning and social identity formation does not regard either the individual or the community as the sole unit of analysis. Rather, it takes as its focus the mutually constitutive process of the identity of the person and the community (Wenger, 1998 p. 146).

Because identity formation is a mutually constitutive process engaging the individual and the community, it requires continual negotiation. Wenger frames this negotiation of experience as “defin(ing) who we are by the ways we experience our selves through participation as well as by the ways we and others reify our selves” (1998, p. 149). This definition lends primacy to the lived experience of participants. It is through the daily engagement within communities of practices that individuals come to understand who they are. Within this theory of learning the notion of belonging (to a community) is as important to social identity formation as the idea of becoming (an individual).

Wenger defines belonging in terms of membership. Continued participation in a community over time yields a degree of membership. This membership can be past or present, full or partial, central or incidental to our identity (Wenger, 1998, p. 158). The more current the membership, the fuller the participation and the centrality of this membership to our identity, and therefore the more familiar the practice. Over time, this familiarity with the practice engenders competence because participation is full and central to the individual's lived experience. Familiarity via membership is certainly not the sole way to achieve competence at a practice. However, for the purposes of this study, I assert that we become competent at a practice when we consider ourselves familiar with it through full and central membership in a community in which the practice takes place.

It is worth noting here that Wenger makes two points when discussing membership. The first is that we are all concurrently members of multiple communities of practice. The second is that we accumulate a repertoire of practice based on our participation in these communities. This multi-membership creates a landscape of practice wherein, "identity... is a layering of events of participation and reification by which our experience and its social interpretation inform each other... (and) we recognize the history of a practice in the artifacts, actions, and language of the community" (Wenger, 1998, p. 151-153). Wenger's notion of a repertoire of practice is similar in some ways to Rymes (2010) conception of a communicative repertoire, which she defines as a, "collection of ways individuals use language and other means of communication (gesture, dress, posture, accessories) to function effectively in the multiple communities in which they participate" (p. 530). It could be assumed that in developing a repertoire of practice one would also acquire, linguistically speaking, a communicative repertoire. The development of a communicative repertoire via multi-membership means that participation in layers of events over time in multiple communities provides a person a set of communication tools with which they can

signal familiarity and thus, competence.

Accumulation of a repertoire of practices, or the process of collecting social practices, implies movement across time. Wortham and Wenger agree that such movement is a trajectory that must be acknowledged in explaining social identity formation. “Publicly circulating metapragmatic models and interactionally negotiated events are essential to social identification, but a full account must also attend to individuals trajectories over time” (Wortham, 2006 p. 47). And, as Wenger states, “A sense of trajectory gives us ways of sorting out what matters and what does not, what contributes to our identity and what remains marginal” (Wenger, 1998, p. 155). Through participation we are able to experience various possible trajectories. Wortham’s models of identity, “attends to sociohistorical models of identity, the local versions of these that emerged in the classroom, the trajectories of individuals who were identified over time with respect to these models and the contingent events in which acts of social identification actually happened” (2006, p. 49). His discrete speech event examples can be connected to each other over time to empirically analyze how social identities emerge. And the practice theory for which he advocates provides an epistemological bridge to the communities of practice formulation originated by Wenger.

Wenger’s contributions in his framework of identities of practice aligns with Wortham’s work and yet he applies it to contexts outside the classroom. He contends that negotiations of meaning occur between the individual and the community in such a way that through social practice they come to mutually constitute each other. The broad conception of communities of practice means that social practice and learning co-occur in many settings and over various timescales in groups of which we are all members. Out of this membership individuals become familiar with both the social interactions and the content of the discourse, allowing for familiarity

and with continued full and central practice, competence. And finally, Wenger hits the ball back to Wortham, so to speak, in acknowledging trajectories of identification, or continuous development of the self, as a salient aspect of social identity formation.

Cultural Values and Manual Labor Practices

Building on the work of Wortham and Wenger, I argue that it is also useful to consider the boys' identity trajectories by beginning with the social practices they engaged in, and what they have learned in their home and community environments prior to participating in the dissertation project. The purpose of this is to provide context and an asset-based perspective of the boys learning and social practices. Just as with the excerpt from the conversation with Francisco that introduced this chapter, at the beginning of the dissertation project the boys had difficulty identifying and articulating their own positive traits. Because of the importance that the concepts of models of identity, and identity in practice, place on trajectories, I find it relevant to begin with the following that describes part of our first meeting before we began working with computers:

In one of the first meetings with the boys, I ask them to introduce themselves and mention something they are good at. This initial attempt to begin by positioning them as asset-laden is intended to counter the deficit-perspectives too often found in research on demographically non-dominant youth. However, my request is met with self-deprecating and goofy comments like, "I'm a bum", followed by group laughter. When the giggling subsides, Pablo, our serious student and an athlete, is the first to speak up and mention that he enjoys playing football. I have observed that in this type of setting with middle school boys, seeming eager or interested can possibly invite teasing. Pablo's physically-imposing size and serious demeanor make it less likely that this utterance would be met with ridicule. In this way his ability to be forthright gives others tacit permission to do the same. After this, a couple of the other boys mention they enjoy and feel they were good at playing video games. A couple of the boys open up and mention the place in Mexico where their families are from. They are proud to be from these places, and the energy in their voices is a stark contrast to goofy self-deprecation they had expressed just minutes earlier. Their contributions, in effect, move the conversation from expressions of self-deprecation to an honest and vulnerable conversation in which the boys begin to talk about themselves and their families' origins in positive terms.

But why was my initial attempt to have the boys position themselves as “being good at” something met with humor? It could be that humor was used as a mechanism for performing modesty, as they boys did not want to seem conceited or self-centered. But their laughter could also reflect a lack of experience in responding to a question that asks them to identify socially their individual strengths and merits. It is worth noting that even though the purpose of the conversation was to have the boys talk about themselves individually, the focus quickly shifted to their families.

The boys, all from families of Mexican-origin, share some similar cultural values that they reference during our conversations in the tech room. It was important to me as a critical ethnographer and advocate of asset-based formulations of non-dominant learners – formulations such as Funds of Knowledge (Gonzalez, Moll, Amanti, 2005) and Community Cultural Wealth³⁰ (Yosso, 2005) – to acknowledge these values when expressed. I saw them as beneficial to, and enhancing the boys’ abilities to learn. To further explore this asset-based approach to learning, I will begin by describing the ways the boys spoke about the values they learned in their homes.

Una Buena Educación/ Bien Educado

One cultural value shared by the boys’ Mexican-origin families is to be *bien educado*, which can be translated as well-educated. The nuance of this expression is hard to capture in a direct translation. As Villenas explains, “To have *una buena educación* (a good educational base) mean(s) having the social skills of etiquette, loyalty to family and kin, and most important, respect” (2001, p. 12-13). Villenas further contextualizes the term drawing upon the work of Valdés (1996), stating that “For most ordinary Mexican families, individual success and accomplishment are generally held in lesser esteem than are people's abilities to maintain ties across generations and to make an honest living” (p. 170). In other words, they value becoming

³⁰ See Chapter 2: Literature Review

educated in far more complex and communal terms rather than as a process whereby individuals acquire knowledge and credentials that are individual in nature.

When I asked the boys for examples of things that their parents taught them that they did not learn in other places, the boys mentioned saving money, and working hard. But we also made a connection between the concept of being bien educado and formal education. When I tell them that grades are important, but really colleges want students that are well rounded, Pablo asks me, "What's that supposed to mean?" "Exactly, that's a really good question right, have your parent's ever used the word 'bien educado'?" "Yes," Pablo and Francisco respond. "What does that mean?" I ask. "Good educated," Pablo answers. I ask him to explain. "Well, it means like, when your parents, like when they teach you well, like, you have good manners, or like, well, I have good manners in school, with any adult. Like, they tell me what to do, and (if) I don't do it, that just shows that your parents didn't teach you well, and the opposite is like if you do it, and you listen to them and then you're well educated, a way of saying you have good manners with them, you respect them," Pablo says. I agree and tell him that somebody could get good grades- he finishes my thought - "and disrespect you," he says. "So when I say well-rounded it kinda has to do with that bien educado part. Respectful, but also that you're interested in education and learning," I tell them.

One of the main ways the boys received una buena educación was learning manual labor practices with male family members. At one of our first summer meetings we discussed some of the labor practices in which they had been engaged, such as Pablo laying concrete and Alex learning plumbing and electrical work. As you read the next section, it is important to remember the boys are all 13-14 years old when they are working alongside their elders and had begun these practices one to two years before that.

Manual Labor Practices

Three of the boys were involved in regular labor practices with male members of their family. For all three, these involved manual labor work in the areas of construction, electrical, plumbing, and landscaping. The boys engaged in these practices with their fathers, grandfathers, brothers, and brothers-in-law. At times, such as in Alex's case, they would miss a few of our Saturday tech room sessions because family members needed their assistance.

Alex missed three sessions over the first summer to help his grandfather work, but always stayed in touch via email to communicate his absences beforehand. With a bad back and knees, his grandfather needed Alex's assistance with certain 'handyman'-type work, like tarring roofs, rewiring, and repairing plumbing. Once, Alex was dropped off by his grandfather in a dark blue cargo van, and motioned to the dirt on his t-shirt, "You can tell I just got done working, huh?" I chatted with his grandfather for a few seconds, whom he calls "Pop-Pop", and asked him if he was "putting him to work" motioning to Alex. Pop-pop tells me, "Yes, he's learning all kinds of stuff," in accordance with a funds of knowledge perspective, that asserts forms of learning in the home are valuable.

Pablo also spent time working with this brother-in-law and one morning arrived looking exhausted, telling me he spent the whole morning laying and smoothing concrete. He slumped down on the couch and was much less animated and engaged than usual. He also shared with me that he sometimes helped his brother-in-law clean debris from apartment complex construction sites. "Those apartments... are for the college people," he tells me, making a telling distinction between the people who will live in the buildings and those – including himself – that clean the debris from construction site. And during times of heavy snowfall, he joined his brother-in-law and a crew of others in the pre-dawn hours for the twenty-mile drive to Philadelphia to solicit their snow-shoveling services. He told me he once made \$160 in a 14-hour shift, that his brother-

in-law paid him by the hour and he hadn't sleep that night. He had left for work about 1 A.M. and shoveled until about 3 P.M. the next afternoon.

Matéo had been working on his father's construction crew during our final summer together. "Like twice I had to carry 80-pound sacks of cement on my shoulders" he told us, "'cause normally they don't make me do a whole bunch of stuff. (But) one time I was the smallest one there, I could fit into the boxes, you know the drain boxes, it got filled up with mud, I had to go in there and shovel it out... three feet of mud, it took me about an hour..." He had worked the summer before as a busboy at a restaurant where his mother worked, but he told me he prefers working with his dad in construction. I once asked Matéo what kind of skills he thought he learned through work. "I know how to balance more stuff with my hands, I have a better steady hand. And at work I know when dirt is too mushy, because on the roller you have a vibrator, you have to know when to use it and when to not..." He explained how he used the roller to pack down the ground. I asked him if his dad taught him to use that and he tells me, "they all taught me, my dad taught me how to drive it, how to turn it on, to check the oil, that the battery is on, how much gas it has, and then the boss showed me the techniques on it, he showed me how the vibrator works, ... and another skill was like the cement... another thing will be how the buildings will go, ... I see how all of that goes, and I basically saw how all of that worked." He continued telling me that he is familiar with drainage systems and stripping an area of land and digging down to create a basin. He explained the details of the construction procedure for creating a basin, the piping, the boxes, the drain, etc., and how he knows how to mix concrete according to texture, appearance, consistency, and the timing from mixing to pouring.

One can appreciate that the boys' initial timidity to acknowledge what they are individually "good at" is a form of modesty that obscures the skills they have acquired working

with family members. It could be that as Valdés asserts, the cultural value of *una buena educación* places individual accomplishments in lower esteem, and the boys view their manual labor skills as part of a group family/kin effort. Or, the boys could recognize these skills as valuable to the family and are not sure how they are viewed in other contexts. In the case of Alex's grandfather, he is aware of the skills he is teaching when he tells me Alex is learning, "all kinds of stuff". And Matéo doesn't hesitate to use technical terms – part of his communicative repertoire – when explaining the construction equipment he operates and the types of large-scale work he engages in with his father's crew.

The common thread through these narratives is that a strong work ethic is part of *una buena educación* and one aspect of a model of identity that circulates at the local level. When they engage in manual labor practices with male family/kin they are also engaged in situated learning in a community of practice, one that predated their experience in the tech room. Here the boys simultaneously learn discrete skills along with a work ethic and a sense of its importance, all as part of familial social practice. And as members of a community of practice, they have the opportunity to align their identity, fully or peripherally, with these manual labor practices. From a funds of knowledge perspective, Lopez (2001) frames these family-related manual labor practices as a form of parent involvement often unacknowledged by institutional models. "The parents believed that if their children learned to work hard, they would be equipped with the necessary skills to be successful in both the academic world and the world of work" (pp. 425-426).

I encouraged the boys recognize the knowledge and skills they were learning through these manual labor practices as assets. Yet at the same time, I also worried that missing our meetings to participate in their familial labor-related community of practice might contribute to what Paul Willis (1981) describes as social reproduction. I questioned if the values of the home

were aligned with the skills the boys were learning in the tech room, which are considered valuable forms of dominant social capital. Acting on the value of helping their family and missing our tech room sessions could have compromised their ability to learn skills that could provide them with a form of cultural capital. This becomes further complicated when one boy's father described the tech room activities to his son as, "playing on computers," but another boy tells his father, "I'm so glad because I'm doing something constructive (in the tech room) during the summer, and during the school year, so I'm staying out of trouble."

In my limited roles as a researcher and tech room coordinator I had some degree of insight into the tension between the values of the home and the values of the tech room and the potential implications for accumulating more dominant forms of knowledge and capital. However, the boys live their lives negotiating identity trajectories that either move toward maintaining intergenerational and kin bonds through manual labor practices or achieving in ways that prioritize individual accomplishments over loyalty to family. This is, of course, an oversimplified binary. It is possible to acquire una buena educación and funds of knowledge through manual labor practices while still valuing the skills the boys were learning in the tech room.

Identity formation is a complex process requiring a simultaneous recognition of the importance of home values and tech room practices by the boys, their families, and myself. It would be difficult, and may be considered disrespectful by his family, for Alex to refuse to help his disabled grandfather with handyman projects. But it is also dismissive to characterize the boys self-directed digital literacy practices as simply playing on computers. If the boys were able to articulate their identities in terms of being "good at" both family-based manual labor practices

and self-directed digital literacy practices it would be possible to resolve the tension between the two.

I now turn from the cultural values and manual labor practice aspects of the boys' identity formations to the dimensions of language ideologies, related understandings of race, and discourses of masculinity. These elements of the boys' identities are actively negotiated individually and communally, and are discussed in our tech room meetings. How the boys choose to enact these aspects of possible models of identity is a critical component of their social practices.

Negotiations of Language, Race, and Masculinity

Because this chapter focuses on how the boys' identities evolved relative to their individual and communal learning practices, it is relevant to address how they discussed and practiced aspects of their identities related to language use, race, and masculinity. As young Latino males in a New Latino Diaspora town, the Latinx, Black, and White long-term residents had expectations of them. The boys reported interactions with these residents in their community and describe instances like initially being publicly addressed in Spanish, or conversely suffering racial microaggressions. In these instances, the boys were being formulated by others and they relayed how they perceived these interactions. Using Wortham's (2006) conceptualization of social identity formation, these expectations were often based on widely circulating (such as mass-media), and local models of identity. The models of a middle school-aged boy from a Mexican-origin family – that is, how one should speak, interact with others, the dispositions and beliefs he holds – varied depending on the locals they encountered and the social contexts in which they interacted. Their own family members, a teacher with daily experience with the boys and their peer groups, and a lifelong resident of Marshall who has little interaction with members of the Mexican-origin community, all have very different conceptions of who these boys are.

Ultimately, the boys are in the process of choosing which models to align themselves with and in which social contexts.

The boys' focal social practices discussed in this section include language use and ideologies, how they perceive the relationship between language and race, and discourses of masculinity. I will describe how the boys discussed their Spanish language use as well as language practices I observed in the tech room. I also consider how their conceptions of race where in part informed by the locally-circulated language ideologies. I close with a description of their social interactions in the tech room related to models of masculinity.

Language Use and Ideologies

In the three years that I spent living in Marshall, Spanish was present and common in many public spaces in town. It was normal to overhear a Spanish language conversation on a sidewalk, or cumbia music and accompanying lyrics streaming from storefronts. Even legal and financial institutions like the courthouse and banks accommodated Spanish speakers, though its use in these spaces was rarer. While English was the *de facto* language of the dominant population in Marshall, I witnessed anecdotal instances where individuals from non-dominant populations, such Black and Asian community members would speak to Latinx residents in mock Spanish or Spanglish – not as a form of covert racism (Hill, 1998; Zentella, 2003), but as a sort of friendly linguistic genuflection between non-dominant persons in public social settings. This also served as a tacit acknowledgement that Spanish language use held some degree of prestige among non-dominant populations in Marshall. The use of English, Spanish, and Spanglish in Marshall provided fertile ground for translanguaging practices, understood as “the act performed by bilinguals of accessing different linguistic features or various modes of what are described as autonomous languages, in order to maximize communicative potential” (García, 2011, p. 140). With these contexts in mind, the boys reported varying levels of Spanish and English language

use in their home and outside of school.

Six of the eight boys acknowledged their home Spanish language practices. Alex, who identified as mixed-race and whose mother is of Italian-descent, spoke English with everyone at home, including with his Spanish-dominant father. Alex claimed that he didn't speak or understand Spanish, though he wished he did. He made no attempt to obscure his Mexican heritage but he told me, "I never learned, my Dad never really taught me because he was always working." Alex also mentioned that he planned to choose Spanish as one of his high school electives, "so I can actually learn Spanish, so maybe that'll help." In this way Alex engages in translanguaging at home, listening to his father in Spanish and responding in English, even though he self-identifies as a monolingual English speaker. Further, he first contextualized this monolingualism in the past, that his Dad never "taught" him, and his hopes of bilingualism in the future, through the formal education mode of a high school Spanish class. He's not aware or doesn't acknowledge that he is actively engaged in translanguaging practices in the present, speaking English with his Spanish-dominant father while understanding the Spanish responses.

Dante also practiced translanguaging at home in the way that Alex did – speaking English to his Spanish-speaking mother. One day when I mentioned how I spent my early childhood with my grandmother, with her speaking Spanish and myself replying in English, I asked Dante if this is similar his home situation. He utters, "Mmhmm," affirmatively, but he seems a bit uncomfortable discussing it in front of the other boys. Another time, the community center director, originally from Mexico, began speaking Spanish with the boys and Dante became visibly uncomfortable, realizing he might be expected to respond in Spanish when the director asks Dante where he is from. Dante says, "here" and points down, indicating he understood the question but would only answer in English. The director sensed Dante's discomfort and

responded with a sprinkling of English during the rest of the conversation.

Over the course of the dissertation project, none of the boys spoke Spanish with each other in the tech room except for interjections of Spanish words or phrases in English sentences. While the community center was created to serve the Latinx community in Marshall, the boys didn't use Spanish on a scale equal to their reported home language use practices. This could have to do with the digital literacy platforms being based in English, consideration of the learning space as an English-dominant space, or my presence as a bilingual, but English-dominant, adult in the room.

Given my background as a bilingual educator and my orientation as an activist-researcher, I understood the importance of modeling language practices as method of demonstrating their value. Nelson Flores and Ofelia Garcia (2013) note that utilizing translanguaging as pedagogy, especially in a third space like the tech room, allows learners to develop new subjectivities not defined by institutions or systems. This provides the possibility of a new, locally-produced, metapragmatic model in the vein of Wortham's models of identity.

"Translanguaging in education not only creates the possibility that young bilinguals could use their full linguistic repertoire to make meaning, but also that teachers would 'take it up' as a legitimate pedagogical practice in educating those who are linguistically different" (Flores & Garcia 2013, p. 246). I would interject Spanish phrases with the boys, both in the tech room and via written correspondence like email and text messages – a form of multi-modal translanguaging. While the boys used Spanish sparingly in the tech room, they weren't hesitant to correct my Spanish. One day when Pablo and I worked on a Code Academy problem I made a suggestion and he told me that it worked, sounding happy and relieved.

I exclaim, "Te dijo!" "Te dije," he corrects me, then celebrates completing the lesson, "I guess I did it, so I'm proud of myself, the last one, I'm I done? I did it!"

This is an instance of pedagogical practice when taking up translanguaging inverted traditional institutionally-related teacher-student models providing Pablo the opportunity to assert his Spanish language proficiency. It also requires some reflexivity on the part of the teacher, to understand that the willingness to make a mistake provides the student an opportunity to incorporate their Spanish language proficiency in a learning setting.

Translanguaging also has multi-modal and connected learning (Ito et al., 2013) roles that extend outside the physical space of the tech room. When I emailed the boys using English and Spanish in the message, Francisco asked me why, as though email was the exclusive domain of the English language. Another time, Pablo is working on learning CSS code, which stands for Cascading Style Sheets. This prompts a conversation among us about Spanish-English cognates, specifically *cascada* (waterfall) and cascade. Later Pablo eagerly reports that he was the only student in his class able to define cascade during a discussion in school because of our earlier conversation in the tech room, connecting his full linguistic repertoire to formal academic learning.

Through these examples we see how the boys engage in translanguaging practices in the home, community, school, and tech room. Even though Alex and Dante consider themselves monolingual English speakers, part of their daily lived experience is communicating with Spanish-speaking family members. The other boys were comfortable and proficient using Spanish and English. Alex aspires to learn Spanish, and holds out hope that he will be able to acquire it in the high school classroom. Even though he lives with his monolingual-Spanish speaking mother, Dante refused to speak Spanish and even conversation about his home language practices made him uncomfortable. The boys each interact with Spanish in different ways, but one similarity is how they acquiesce to English language use. For Alex, his English-speaking mother and extended

family set the terms of language use in their home. For Dante, he is recalcitrant with the Spanish language use of his mother and with the community center director for reasons he never explains, and identifies strongly with monolingual-English production practices. Pablo is fluid, working on a coding problem in English, correcting my Spanish, and expressing enthusiasm in English for completing his lesson. Francisco questions the use of Spanish in e-mail communications. It's clear that the boys practice translanguaging, but have a diverse set of relations with Spanish, and English is dominant in the tech room. Each of these relations presents various models of identity related to language use and ideologies.

Linguistic Connections to Race

The way the boys used and understood language had both tacit and explicit connections to race. Matéo explained that when he worked construction with his dad, “over here in construction, how we work it's mostly all Hispanics, only the main director of the crew and this other guy are the ones that speak English, but all the other workers speak Spanish, unless the boss is around, so the boss understands what we're saying.” I confirm, “So if the (white) boss is standing there, you guys will speak in English, so that he understands?” Matéo responds, “Kind of, so if he knows we're doing the right thing with the construction stuff.” Here, Mateo instinctively acknowledges that the Spanish-speaking Latinx plurality of workers have unequal power relations with the two White, monolingual-English speaking crew members, one of whom is a supervisor.

In the community, a few of the boys reported that sometimes people would speak Spanish to them because they “look Mexican,” with phenotypically brown skin and black hair. Interestingly, Leo told me about an Afro-Latino classmate of his from Mexico, “(When he arrived) ...everyone thought he was like- African American, so they all speak to him in English, but the funny part was, all he knew was Spanish, no English. He was new to the country... and

so, like everyone was shocked when they heard him speak Spanish, and he would explain, he'd be like, 'no English'. He's like super dark, and he struggled with English. And it was just awkward because everyone just thought he was... black, I guess. Though they didn't know he spoke Spanish." This led to Leo talking about African-Americans at his school attempting to speak Spanish, "In my school they always try to speak Spanish but, pffft... (laughs)" I comment that, "Well, that's interesting, too, right? 'cause like, they're not making fun of you guys, or being like-", "They just wanna learn," Leo concludes. This last comment supports what I had observed in the community earlier with individual from non-dominant groups attempting to incorporate Spanish language use into their social interactions.

When we discussed different Spanish dialects and vernaculars in the tech room, the subject of skin color came up when discussing words like, "güero", "güerínche", "pocho", and "gabacho"³¹,

I tell them that, "They used to make fun of me, man, they used to call me 'white boy, gabacho... pocho', it means you're from a Mexican family, but you act white, or you're light skinned or something." "Gringo?" Dante asks. "Exactly," I say. This leads to us putting our forearms next to each other to compare skin colors. Pablo has the darkest skin and he feigns being upset. "Aww..." Pablo says, and Marcos laughs.

When we shift from discussing the Spanish words that denote whiteness to actually comparing our skin color, the boys don't react to this as though it's unnatural. However, Pablo's utterance of disappointment or light-hearted embarrassment, and Marcos' laughter denote an understood internalized and shared colorism.

The boys would sometimes utter self-referential epithets. While these were often voiced in a joking or mocking manner, it demonstrated that the boys were highly aware of how some dominant discourses actively circulated and marginalized Mexican and Latinx-origin people and practices. For example, I told the boys that we had been invited to the Digital Media Lab at Penn

³¹ These are all synonyms for "gringo", or light-skinned. Also the de-ethnicized connotation.

and Digital Design Center at Drexel, but we would need two parents to come with us. Dante immediately commented, “There might be some white haters calling us beaners.” Pablo responded by saying that Leo calls everybody “beaners”. Leo did in fact utter this epithet a few times over the course of our sessions, mostly to get a rise out of the other boys. Interestingly, one day Leo is trying to decide on a username for a program and told the others he will use, “beaner”. The other boys joined in, suggesting variations on “beaner”, “wetback”, and “frijolero”. The exchange became an opening for Alex to index skin tone.

"You should do 'light-skin squad'," Alex offers. I ask Alex about it and he explains, "Nah, you remember that dude (from school) Miguel, uh, he just sent me a picture, and I don't know why he sent me the picture but he said, uh 'the light-skin crew', uh, 'the light-skin' or something, and so I said 'you should make your email the light-skin crew.'"

It’s possible that Alex is offering “light-skin” as an alternative to “beaner”, and it is telling it would occur in the same conversation. In this instance, Alex is making a connection between a racially-charged epithet and skin tone.

The example of Leo’s Afro-Latino friend who surprised everyone at school as a monolingual Spanish speaker indexes a model of black people as monolingual English speakers being understood at the local level. For Matéo, his understanding of the workplace hierarchy as social practice is evident when he mentions the construction work crew is sure to speak English when the (white) “boss” is around. Pablo reeling with exaggerated embarrassment at having the darkest skin tone when we compare forearms, and Alex’s reference to a “light-skinned crew”, index a valuation the boys understand that equates dark skin with racial epithets and lightness, or whiteness, as a preferable alternative to the epithets the boys had been joking about.

At the same time, being “too white” – a monolingual English speaker, is seen by Alex as a liability – he wanted to learn Spanish, he tells me, but no one ever taught him. He contends that “maybe that’ll help,” when looking forward to high school Spanish classes. His father only

speaks Spanish, and Alex understands him, but he tells me he is referred to as “cracker-taco” by his white cousins – his light skin tone, his mixed-race background, and his monolingualism are linked in identity formation. We all identify with our Mexican heritage, but the forearm comparison creates a scale – insinuating degrees of *Latinidad* – and legitimizing the individual and social recognition of that identity. Leo’s story about his monolingual Spanish, Afro-Latino friend from school provides a curious point of analysis. Even in a superdiverse (Vertovec, 2007) New Latino Diaspora town, locally-circulating models of identity dictate to the boys and their peers that Spanish-language use is reserved for a narrow spectrum of skin tones. Too light, and locals like Alex’s white cousins will take you for a cracker, who can’t, or shouldn’t, speak Spanish. Too dark, and schoolmates will react with shock and disbelief that you only speak Spanish. However it is a model under contention, as Leo reports his Black classmates are “always trying to learn Spanish.”

Masculinity

When the boys discuss girls and women, it is framed within their lived experience through family, community, media, games, school, and dating experiences. In the tech room, our conversations sometimes centered on issues related to masculinity. I illustrate here how some expressions of masculinity adhere to monolithic stereotypes of aggression, violence, and misogyny, while other behaviors, attitudes, and utterances offer a more nuanced portrayal of how these boys understand their role(s) as men. Therefore, I argue, these social practices fortify existing models of identity and also create new possible ways of being for self and others.

My understanding of masculinity as a concept most closely aligns with the semiotic approaches that Connell (1995) describes wherein,

masculinity is (defined) through a system of symbolic difference in which masculine and feminine places are contrasted ... What can be generalized is the principle of connection. The idea that one symbol can only be understood within

a connected system of symbols... No masculinity arises except in a system of gender relations (p. 70-71).

The relations that I analyze in the following examples are of two types. The first is how the boys discussed women portrayed in the media – specifically, professional wrestling-themed YouTube videos and online gaming. The second is how the boys contentiously discussed their relations with the girls from school. I analyze the interactions that take place in the tech room in order to consider how discourse about the feminine indexes the masculine. These discourses offer both models of identity, and identities in practice. Or what Connell describes as, “a place in gender relations, the practices through which men and women engage that place in gender, and the effects of these practices in bodily experience, personality, and culture” (1995, p. 71), that play a role in the identity formation for these middle-school aged Latino boys.

Francisco engages with what I describe as hypermasculine YouTube videos. During one session Francisco introduces me to a series of YouTube videos he watches for entertainment he refers to as Grimm videos, the narrator’s name. These videos provide Francisco with a certain model of masculinity that is aggressive, violent, profane, and misogynist. The series consists of videos of an adult male narrator playing with wrestling action figures on small sets. Essentially it is a professional wrestling drama with action figures, conducted under the guise of product reviews. There is a fair amount of cursing and offensive remarks that are racist and misogynist. In one video, the host walks into a small room, about the size of a walk-in closet, and it is filled with mirror-backed shelves from floor to ceiling, and on these shelves there are hundreds of wrestling action figures. I begin to understand why this series appeals to Francisco, the creator of the video is as dedicated to his wrestling figures as Francisco is to his Godzilla action figures. Francisco tells me about Grimm and his reviews, saying, “he’s funny, he’s awesome, sometimes he’ll make fun of you if you show them one of your crappy superstars.”

Francisco, more than the other boys, reported that he had limited opportunities to socialize with peers. He told us that most of his time out of school is spent cloistered in his apartment or at the restaurant his parents run. In the absence of prosocial models of masculinity, or possibly in addition to them, Francisco took up the phrases and intonations similar to those in hypermasculine videos and circulates them as discourse. Francisco mentioned the narrator, "would always say bad words, and sometimes negative words, and racists words, and inappropriate words sometimes, and it would be funny."

The data show that Francisco uttered certain phrases shortly after they had been vocalized in the videos:

Pablo becomes irritated with the loud volume of a video and asks Francisco what he is watching, "because I just hear people screaming." A few seconds later, Francisco mentions he finished his sandwich and Pablo tells him that no one cares. Francisco responds, "Are you gettin' smart with me, jackass?" ventriloquating the obnoxious voice on the video Pablo referenced just seconds before.

Here Francisco is not simply repeating the phrases, but mimicking the aggressive intonation of the video's narrator. When he voices the same tone of the video it is a subtle mode of communication. Essentially, the videos demonstrate how to intonate aggressive feigned anger. It is possible that the video is legitimating a model of identity and the associated speech patterns that Francisco experiences elsewhere. The day Pablo became irritated with Francisco he shouted Francisco's name a couple of times and Francisco shouted back, "yo, shut up, fuck you all." Also, from my fieldnotes: "It's interesting to note that the tone of the cursing outbursts in the videos are similar to the tone Francisco uses when he's feigning anger, or when he's frustrated, like the day he waited outside for 20 minutes because he didn't realize that our group was already inside. "That's fucking bullshit," is the utterance I'm thinking of". However, it is important to note that because I was not able to shadow Francisco across all the contexts in which he interacts, that these videos may not be the sole source influencing his use of phrases. The profanity that he

mimics from the videos sets the stage for how women are discussed by the narrator, and in turn, how Francisco understands his relation to them.

Though Francisco had many models of feminine identity to relate to, like his mother, teachers, and classmates, the media and videos he consumed provided additional models of womanhood. Within the hypermasculine YouTube videos, there were examples of aggressive misogyny, such as when Francisco told me, "Do you know he started a new show, um Grimm's toy show, he called it Total Sluts." Dante heard this and says of Francisco, "He's going to grow up to rape and kill somebody. Something is going to grow up wrong with you, Francisco." Later Francisco pointed out one of the female wrestling action figures, "Oh, I have this, I have this figure... AJ... she's hot." I asked him if she fights. He responded by telling me about her dating history with certain wrestlers, and who, "she is with now." Part of this framing could have come from the narratives professional wrestling shows presented, or from Francisco's own notions of masculinity and relations to women, but he only talked about this wrestling personality in terms of her positioning next to male wrestlers.

The boys' relations to models of women also carried over into their gaming practices. In one instance Marcos and Dante were looking at a role-playing video game on Marcos' iPod:

Marcos questions Dante on why he picked the "girl character", telling him that the "guy character" has more power. Marcos goes on to explain that the other characters in this game are people like him and that if his girl character gets married then the guy character, who is probably a guy in real life, will ask him, "who are you really?" And it will be kind of creepy when they find out Dante is a guy playing with a girl character. Marcos tells him to erase it and start a new character. Dante decides to start over.

This attitude was expressed not only towards characters, but entire games as well. When Dante and Francisco were discussing the game Final Fantasy, I ask Dante if he plays it and he comments that he doesn't like it, that, "it is for little girls."

The second type of relation to women that positioned the boys' masculine identities in practice is the discourse that occurs in the tech room about their female peers. A couple of the boys have girlfriends, and on one occasion the boys engaged in teasing that exposes a rift between Alex and Matéo concerning a specific girl:

"He's messaging his bitch," Matéo says of Alex, who is working on SketchUp, then follows up with a hushed, "that's why she's not happy." Alex calls Matéo, "a creep" and, "a stalker." "How would I know that though?" Matéo asks rhetorically and laughs. "He knows where she lives," Alex says dryly, still more engaged in Sketch Up, but also clearly ready to call Matéo out. "Yeah, that's because I walked her home... three times," Matéo challenges, this time he does not follow his comment with laughter. Pablo and Leo immediately respond with "Ohhh," and, "Damn, Alex doesn't know that, you're making Alex jealous, stop that." "I walked her home already," Alex says hushed and still attempting to focus on his work. "You're a savage," Leo tells Matéo, and Matéo reels with laughter. Alex calls Matéo a creep again. "Why? 'cause he walked your girl to her house?" Leo says with faux shock, but Matéo de-escalates, "she's not really my girl anyway." This emboldens Alex who tells Matéo, "Don't start, I got things your ex-girlfriend sent me." Leo continues taunting, "Oh, Matéo, exposure!" Alex agrees and follows up with, "I just gotta find the picture, anyway." "It doesn't matter, if she sent them to you, Alex, who knows who else she sent them to." Leo asserts.

Obviously, Alex and Matéo were interested in the same girl from their school or neighborhood. But at no point in the conversation was she referred to anything other than, "bitch", "she", "your girl", or "my girl." In this conversation she was more property than person, and the trafficked goods in the boys' exchange of one-upsmanship as the others goaded them on. Though an incomplete account of how this person functioned in their lives outside of the tech room, in the context of this interaction the boys were competing to assert power based on who had the greater degree of intimacy with this individual.

These examples illustrate that the boys were interacting with circulating models of masculine identity and functioning within a range of available models that include: toxically hypermasculine videos that provided one template for ventriloquating such discourse, one-dimensional sexist media portrayals, heterosexually-normative gaming interfaces, and

interlocutions intended to assert dominance with a female classmate as the topic of conversation. However, the boys' conceptualizations of masculinity were wide ranging, their practices emergent, and other less-frequently indexed locally-circulating models of femininity informed their lived experience. This is evident when Pablo told me that when his dad isn't there he's the, "man of the house," but he still he has to listen to his mom. And when Francisco told me, "Sometimes a real man can cry... if you cry, there's nothing wrong with crying..." They are in the process of problematizing monolithic constructions of masculinity, and in doing so, are widening the possible models of identity they can take up and thus choose their individual ways of existing in the world as young men from a broader range of complex masculine identity formations.

Throughout this section, aspects of the boys' identities related to their language use, how language relates to race, and how masculinity functions in their discourses were discussed via examples that occurred in the tech room or practices the boys reported. There are salient messages that pertain to the boys' identity formation. Spanish language use in their surroundings is normal, but the hegemonic power of English keeps Spanish marginal in learning contexts outside of the home. Local models indicate that Spanish/English language use related to racial categories, and specifically phenotype, is narrow. And though not explicitly indexed, the boys have internalized how colorism functions within the local Latinx community specifically. And, the boys' formations of masculine identity are grounded in a handful of circulating models that fit into the categories of aggressive, heteronormative, and misogynistic discourses. But, emerging alongside these discourses, the boys mention other possible models that include acknowledging the authority of maternal figures and the ability to display emotions of vulnerability. I will now turn to how models of identity and identity in practice are influenced by the social practices the boys engage in related to their digital literacy learning.

Processes of Social Practice in Learning

With a grasp of the various dimensions of the boys' identity formations, including the importance of una buena educación, manual labor practices, discourses of masculinity, and language use and its relation to their understandings of race, I will connect those to the social learning practices of the tech room. Recalling Wortham's (2006) and Wenger's (1998) conceptualizations of identity formation taking place over time, or identity trajectories, I remind the reader of the boys' original timidity in articulating their personal strengths. Early in the study, they sometimes made statements in which one of the boys describes himself as personally deficient in a manner as to leave him unable to complete the digital literacy practice at hand. At times, the boys were self-deprecating in a funny way, other times their tone was closer to self-admonishment for a lack of immediate proficiency in their learning practice. Over the first summer in the tech room there were several examples of this type of negative self-talk. While not all of the participants made such statements, there was a clear pattern of initially identifying themselves as deficient.

Just as the previous chapter described their emergence as experts within specific digital literacy practices, this section provides examples of their social interactional patterns and analyses of the dimensions of their social learning development in the tech room. They begin bien educado with manners and a strong work ethic, products of bilingual homes and racially diverse communities, with complex and evolving dispositions related to women in their lives. Yet, they are beginners in this specific type of community of practice where they self-directed their digital literacy learning. They follow identity trajectories as individuals and community members that move from peripheral participation marked by uncertainty about their individual abilities to fully social learners able to acknowledge their own areas of expertise, as well as the expertise of the other boys. The following examples and analyses focus on how through their interactions, they

become familiar with the tech room, the learning practices, and each other. As described by Wenger (1998), this familiarity grows over time and engenders competence. Socially, they learn to collaborate and compete – often simultaneously. And over the course of the dissertation project their negative self-talk gives way to vocal enthusiasm and an increased sense of autonomy, as observed by their continually diminishing reliance upon my help.

The boys brought modes of communication and learning schema from home and school into the tech room. Examples of these social practices include school-based behaviors like raising one's hand when asking for help or permission, modes of communication like rough-natured teasing as a way of bonding – as I observed when I attended a birthday party at one boy's home. The boys also reported taking what they learned in the tech room back to school by answering questions in class and on field trips based on knowledge and skills they had acquired in our sessions.

As a former K-12 classroom teacher, I also brought certain school instructional practices into the tech room such as classroom management techniques and initially attempting (and failing) to use worksheets. My adoption of school instructional practices in the tech room created a tension in teaching and learning styles. In keeping with a community of practice approach to learning, I aimed to adopt a more egalitarian style of teaching and learning. This more egalitarian approach conflicted with the school-informed instructional practices and interactions that both the boys and I took for granted and unreflexively enacted as a result of having been “schooled.” My use of conventional school-based instructional practices was infrequent yet was pronounced when it occurred. Much like a piano student playing an incorrect note in a piece of music, when we reproduced schooling practices in the tech room, we recognized them as discordant.

Familiarity

One noted change over time was the feeling of familiarity that developed between myself and the boys. Most educators have experienced the air of uncertainty and anxiousness present the first days of a new school year, and our first meetings were very similar. However, about a month into our first summer together, when we were meeting on Wednesday and Saturday afternoons, the boys and I grew more comfortable in our roles. I began bringing popcorn as a snack, and the boys weren't shy in suggesting that I bring some Gatorade, too. I thought their newfound uninhibitedness amusing and later noted later that they must feel safe making such a request. Familiarity can be thought of as a process or a trajectory – the boys developed a sense of familiarity between themselves (socializing amongst each other), their learning practices (both with the hardware and the programs they used), and with me (making direct beverage requests, for example).

Part of my pedagogical approach, as well as the anthropologist's intention of developing rapport, was to help foster this familiarity by sharing examples with the boys of times when I was new to a social or learning practice, and how I learned it was important to understand any difficulties as a normal part of the process. In fact, about two months into our regular meetings I noted,

There is a sense of familiarity about the tech room that didn't exist a month ago, when on the occasion that one or two of the boys was absent the rest would display a lack of direction in not knowing what to do. But today they settled in and as they turned their computers on, we chatted. Dante shares that he is nervous because he'll begin working for his brother-in-law tomorrow from 10am-8pm for \$10 a day, but he's not sure what he'll be doing. Francisco adds that he feels nervous as well because he'll be performing in a play next week.

In reflecting upon these fieldnotes, I concluded that the boys weren't nervous about the social or learning practices in the tech room. Instead, as part of their social practice they shared their anxieties about aspects of their lives outside of our mutual learning practices. The boys were transforming the tech room into a space where they were able to share these anxieties because we

were growing to trust each other with our concerns. Although the development of this trust and these social practices is possible in school, their reported highly-structured curricula and the regimented environment I observed make it improbable that the school can provide the same degree of latitude as the tech room.

Halfway through the study Dante did not arrive as usual and Francisco volunteered to walk the two blocks to Dante's house to get him. When they returned Dante told us he was sleeping in because they were moving later the same day. When I asked him where he is moving to, Alex interjected, "I hope you can still come, are you (going to be) close or do you live far?" In the tone of this utterance Alex seemed genuinely concerned about Dante, and Dante responded by assuring Alex he is only moving a couple of blocks. Later that same session Alex asked, "Hey Francisco, what's my name?" "Alex," Francisco responded correctly. After several months of either refusing or being unable to remember any of the boys' names, this is the first time Francisco addresses him by name. "Oooohhhh!" I exclaimed and clapped, and Francisco laughed. "Yeah, I got that memorized," Francisco said. "Yeah, like how long it took him to get that memorized?" Alex responded. These examples show the boys developed a familiarity with each other that allowed them to enact caring and concern. Francisco had also lowered his affective filter and demonstrated his prosocial development by acknowledging Alex by name.

Early in the spring we spent the first few minutes of a session commiserating about the weather. The winter of 2013-2014 was one of the coldest and snowiest on record in Southeastern Pennsylvania. Despite the official beginning of spring, we talked about more snow forecasted for the coming week. It is a conversation where we all sounded a bit weary, but comfortable consoling each other. And in a more heartfelt display toward the end of the study, Francisco turned to Dante in the middle of one of our sessions and said, "Dante, you're like a sibling". It

was touching to hear that during the transcription process, as it is part of an account that traces Francisco's social development from the beginning when he refused to acknowledge the other boys by name, to one where he makes an unsolicited statement of intimacy, using the word "sibling" to communicate familiarity as a familial sentiment.

Familiarity as a dimension of the boys' social practices contributed to the development of the boys' identity in practice, as described by Wenger (1998). The experience of coping with the initial anxiousness of being around a new group, with new practices, in an environment similar, but not identical, to school provided a new schema they will recognize in later situations. It also develops their learning-centered social practices, which is important, and often unavailable in other (institutional) learning contexts. Familiarity also allows for collaboration, the next aspect of the boys' social practices I attend to.

Collaboration

The familiarity and trust that developed in the tech room allowed the boys to begin to collaborate on their digital literacy projects. I observed how the boys self-directed independently, and how they self-directed interdependently. Part of my pedagogical approach as the tech room coordinator was that when one of the boys incurred a problem, and I had previously observed one of the others overcome the same issue, I would encourage collaboration by either soliciting the expertise of one or by encouraging the other to ask for help from a peer. In this way I was either tacitly positioning one as an emergent expert capable of guiding their peer, or giving the other an opportunity to practice asking for help from a peer, both important collaborative social practices. For example, in one early session Alex wanted to look at both his SketchUp window and the video tutorial window at the same time. "You can shrink the pages," Dante offered. "You wanna come take a look?" I asked Dante, leveraging his expertise into peer support. I asked Alex to tell Dante what he's trying to do, as a way of privileging their conversation over my own voice.

Over time, and with a developing sense of familiarity, my intervention is not necessary, and the boys begin to collaborate on their own. The audio recordings of these interactions proved especially useful in constructing an understanding of how the boys mutually developed self-efficacy and a higher tolerance for problem solving. I contend that there occurred a socialization process that was peer-guided and centered around their digital literacy learning practices that transformed familiarity into competence through collaboration. In one instance I observed Dante and Pablo working together on a Code Academy lesson:

Dante is sitting next to Pablo and looking over at his screen, editing Pablo's code telling him to, "get rid of that comma or it's not gonna work," Pablo responds, "you forgot this, oh no... I know there's something, oh yeah, right here look, you have to do that first, that... thing." Dante tells him, "That's not what this said, (it) makes the website look like this..." They continue, "Where do you put the 'style=' thing?" Dante asks Pablo.

Pablo and Dante spent several minutes like this, collectively trying to solve the issue they were having and importantly, they did not immediately ask for my help but rather demonstrated a kind of mutual self-efficacy.

Conversely, at least one participant reported a perceived lack of collaboration. Alex spent most of his time using SketchUp, which no other participant regularly used. On occasion, he would self-direct to Code Academy, but never for more than twenty or thirty minutes. At the end of the study, when I asked him about his experiences collaborating, he mentioned, "Well, Pablo was ahead of us most of the time (in Code Academy), well, we were all doing different things. I was doing JavaScript, Pablo was doing, I forget what- so was Dante. So, we weren't all on the same page, cause one is quicker than the other. So, we were all on a separate pace..." "So, you feel like you never really collaborated with anybody closely?" I asked him. "Yeah," Alex confirmed. Even though Alex states that he never learned collaboratively with the others, there was still a social collaboration of encouragement when the boys were working on different projects. Alex was working on his SketchUp project in the spring, and said to no one in particular,

“... the same thing over and over, I have to do the exact same thing, ... I'm putting bricks on the wall and I gotta keep going in the file then import it, I gotta do it every time.” Pablo encouraged him, “Keep doing it, man.” “Keep working on your code, dude,” Alex responded in kind.

In these examples we see the boys cooperatively learning. They collaborate by sharing knowledge about how to learn (viewing a program and video tutorial side-by-side), about specific shared learning practices (how to write lines of code correctly), and the collaborative spirit of encouragement is shared – even when the boys are working on different programs. In these ways the boys are enacting certain models of identity (Wortham 2006) that are engaged, motivated, and supportive social learners. The following connects these patterns of collaboration to forms of competition.

Competition

Hand-in-hand with interactional patterns of collaboration are patterns of competition among the boys when immersed in their digital literacy learning practices. My pedagogical approach incorporated competition as a form of motivation in two ways. In the first, I sometimes initiated competition with the boys coding on Code Academy. I took up co-learning (Rheingold 2014) practices, sitting next to the boys and attempting the same lessons they worked on. The second way I sought to foster competition among the boys was by vocally sharing the progress of certain individuals with the group. This served to acknowledge the work of the individual and also to motivate the others to pursue their own forms of progress.

While I observed competition most frequently between Pablo and Dante when they were learning HTML on Code Academy, it also occurred as a result of one participant gaining a degree of expertise over another participant in one of the programs they were learning. The boys would

often modulate between collaboration and competition. There were no observed instances of one of the boys refusing to help another, but rather they would collaborate to solve a problem then either explicitly or tacitly challenge each other in regard to the progress they were making. Other times, one of the boys would take advantage of the absence of another to gain a competitive advantage, such as when Pablo was absent and Dante utters, “Pablo is so far behind me on Code Academy.”

Because the boys were able to choose their own specialization without a pre-scripted curriculum – individual expertise and specialization began to emerge through competition. That is, one outcome of competition was that the more experienced learner would be acknowledged as having a degree of expertise greater than the others. They began to distinguish themselves in ways that were socially recognized through the utterances of others. In one session, Alex shows Leo how to access the long and complex coding text of websites known as source code,

“Yeah, this is like, what Pablo is doing. This is how *it* makes the web pages, like *they* got the Google, like this is the YouTube, and you, basically, it's the source, this is how *they* make the web pages, you see how much it takes to make this?” Alex states. “Whoa!” Leo comments when he sees a page of source code. “That's what *he's* doing.” Alex references Pablo. “That's way too much for me,” Alex concludes.

At this point Alex used the deictics *it* and *they* to imprecisely index how web pages are created, and in doing so related his own inexperience with writing code. However, he also told Leo, “That's what *he's* doing.” Using a more precise form of deixis to index Pablo, thereby acknowledging Pablo's expertise in writing code. There was a mutual understanding that they weren't so much in direct competition with each other, as competing together, much like a track and field team where each member competes in their own event to score points for the team. These emergent specializations, and the social acknowledgement of others, fostered enthusiasm among the boys.

Enthusiasm

The final interactional pattern I will discuss regarding learning as social practice is how the boys' individually evolving sense of competence was communicated to the group via enthusiasm. As stated above, when one of the boys made progress or solved a problem, I first modeled articulating that progress by vocally sharing it with the group. In turn, when the boys completed a lesson or module, especially those they found difficult, or when they found a new tool or gained some command over an aspect of a program they began to vocalize their enthusiasm to the entire group. These utterances served as sources of social recognition and motivation that were linked to their learning practices. Their vocalizations of enthusiasm occurred more frequently throughout the study and can be thought of as a positive trajectory of self-recognition countering some of the negative assertions the boys had made about themselves closer to the beginning of the study. I also contend that these enthusiastic responses to learning serve the individuals making the utterances by enacting a model of identity as individuals who habitually achieved increasingly difficult learning goals.

It was always heartening to hear the boys articulate their achievements. In our third session Dante uttered, "Yeah, I did it," meaning he completed the lesson. I note it as an example of extended engagement and enthusiasm. This pattern continued with Dante, and in ensuing sessions he arrived and logged on to his iMac and was eager to tell me about a certain level he had reached on Code Academy. He demonstrated self-direction to digital literacy learning and also enthusiasm for the coding he was completing.

In another session Pablo arrived at the tech room visibly weary. When I asked him why, he responded by telling me that he woke early in the morning to go to work with his brother-in-law. The morning manual labor had taken a toll on Pablo's ability to focus and left him more unmotivated than usual. He could not collaborate or compete with Dante on Code Academy the

way he usually did. I checked in with him 30 minutes into the session and he was on the same lesson he began with. Toward the end of the session, Pablo managed to finish the lesson, telling me, “I did it, Carlos”, successfully having written the code to create a hyperlink for a website. Meanwhile, Dante called for my attention by enthusiastically announcing, “Carlos, I did it!”, that he had completed a Code Academy lesson on font size. A little while later he said, to no one in particular, “This is very fun”. At this point he was the most accomplished HTML coder (and coder in general) in the room. His self-direction led to a degree of expertise that he verbally communicated as fulfilling. “Man, I’m so happy how far I got on Code Academy,” Dante mentioned to everyone at the end of the session. It is difficult to imagine the boys spending 18 months working in a self-directed manner without these periodic articulations of enthusiasm.

The Value of Social Practice

Analyzing interactional patterns as processes of social practice in learning, with themes of familiarity, collaboration, competition, and enthusiasm, help us understand *how* the boys socialized. Equally worth our attention is the value that these social practices held for the boys. In our individual interviews at the end of the dissertation project, Francisco and Matéo didn’t claim to have expertise in an area of digital literacy specialization. However, it was the social practices the tech room community of practice provided that were most meaningful to them. Matéo reported that his social bonds with the other boys grew stronger as a result of participating in the tech room. Previously, he communicated with them only at school or in the neighborhood. But during and following the dissertation project, he text messages regularly with some of the boys from our group, sometimes about the digital literacy projects.

Francisco described the tech room was a home away from home, and his levels of familiarity and trust grew over time. In the beginning he was known by the others as the one who couldn’t or wouldn’t learn anybody else’s name, referring to them as “him”, or “you.” Near the

end he told me his time in the tech room was enjoyable because he didn't have the opportunity to socialize with his peers outside of the highly structured school day. And most importantly, he associates schooling practices like homework and tests with stress, while the learning practices he has developed in our group have more positive connotations. At the end of the project he tells me:

Well, my dad thinks I be (sic) here just going on the computer playing around, or hanging around with Dante, I try to tell them the tech room isn't like a place to play with, but they don't trust me because of how I'm doing in school. But I've been telling them, it's not just because I'm playing around, it's because of how I keep forgetting how work, how work, how like work stuff, yeah- and that's what gets me a little bit, you know, edgy. So it's not the tech room that is giving me stress or anything, it's like schoolwork or tests or so. ... that's what gets me a little bit nervous or stressed.

When I ask him how he feels about our Saturday tech room meetings, in which we don't work on homework, he tells me, "I feel fine, maybe like we're going to have like a great day or so, maybe like a fine day." He continues by telling me he thinks about Adobe Illustrator during school, perhaps as a way of mitigating the stress he feels about tests and homework and stays motivated to learn:

Well, whenever I'm in math class, I keep on thinking about how I wanna, how I'm creating something new, like I'm in the cafeteria hallways I start to think of some designs, of what I'm making. I started creating these Godzilla photos from my iPod I have, like I kept finding these perfect drawings, and I started copying them from the screen to the paper, and it was like really fantastic, like I made good details, they were really amazing, and I started saying, if I could do that, If I could do that on paper, how about I do it on computer, like in Adobe Illustrator.

Above, I noted that the boys transformed the tech room into a space where they were able to share their concerns and develop bonds of trust. These bonds extended outside of the tech room and strengthened their interpersonal relationships across environments (at school, via social media, and online) and fortified their identities as digital literacy learners. Dante explains, "Well, with my friends (not participating in the dissertation project), we don't usually talk about the same stuff... But here we have to be more focused, but we can still kind of be ourselves, some of us

(participating in the dissertation project), like, they're really close people and you can talk to them- like usually the same thing if you're outside of the program.” At the conclusion of the study Dante adds about our time in the tech room, “Well, you feel more comfortable, like you're at home, so you can say stuff that you wouldn't normally say around other people. And you feel like more free, instead of like being under a bunch of rules. I find it way easier to communicate with people there than in other places.” “Like what types of other places?” I ask. “Just like school or home.” Dante confirms.

Pablo adds, “Well, with like the guys here I have like a connection with them, because we come here most of the Saturdays and we do certain stuff together. Like in school, we have different classes and we don't get to see each other as much.” This is a theme that Matéo corroborates, “... like I said I don't really hang out with my friends after school. I'm really not like, that sociable outside of school...” However, when he talks about other boys from the tech room he says, “Well, I got to see them over the weekend, so we got to talk more, and before me and Pablo and Leo were not like, good good friends, we were just friends, we would talk and stuff (before the study) - now we message all the time and mess around, mess with each other and stuff, and we're actually better friends.” When I contend they did not have time to socialize, despite the fact that they go to the same school even have the same homeroom, Matéo agrees.

Alex describes the tech room as a safer environment in which to socialize than what he is accustomed to in his neighborhood, “'cause some of the kids I'd hang out with in the summer, before, they were like really badass and all, right? So it wouldn't really matter to me how it was...” I ask Alex to tell me more, and he follows with, “Yeah, basically saying that they always started getting in fights, with everybody, like think they can take on the world, by themselves.” “So tell me how it's different from your interactions with the guys in the tech room, how do you

think the interactions were with the guys at in the tech room?” Alex answers, “Um, a lot more mature. And, uh, more fun... because they understand what we are doing and it's fun because some of them go to my school, so when we're not here we're at school, or like when we're hanging out, we actually talk about some of the stuff that we did here.”

Thus, what is meaningful about the social practice of our sessions is that it provided a stable space over several months that allowed the boys to enact aspects of models of identity that circulated around learning practices. This lived and enacted practice was evident in the familiarity they developed with the learning space and the programs, the degree of competence they demonstrated by collaborating and competing with others, and the enthusiasm created by the learning practices. I argue that this process of socialization is equally important as learning discrete digital literacy skills, as these are requisite social skills for participating in group learning settings.

In summarizing the points above, I connect Wenger's concept of identity in practice to themes of familiarity, collaboration, competition, and enthusiasm. The focal points are the learning-centered social practices. Related to each theme is the pedagogical approach I utilized as a co-learner, sharing my own experiences of beginning a new and unfamiliar practice, asking the boys to help each other – or to request help from another, and modeling vocal acknowledgement of learning progress. Participation in the themes associated with the boys' social practices move them along an identity trajectory from peripheral to full participation. They also enact models of identity related to social learners in ways not probable in a school setting. Further, the value the boys assign to their social practices in the tech room, even when they make no technology expert claims, points to the importance of providing an opportunity where the boys have self-directed time and space to develop as social learners and how this opportunity strengthens social bonds

among them. This provides a strong counterexample to narratives of middle-school aged Latino boys as disinterested and disengaged learners.

Conclusion

This chapter has taken as its focus social identity formation, detailing the practices in which individual young Latino males come together as a digital literacy community of practice. At the beginning of this chapter I set out to answer the following questions by explaining these identity formulations and processes of social practice. How do these young Latino males draw from previously acquired cultural values and learning practices as they engage in learning within the digital literacy community of practice? How do they negotiate their identities relative to discourses of language, race, and masculinity? And, what pertinent social processes shape their emerging sense of themselves as digital literacy experts and members of a group of learners?

I began with how the boys and their families value a strong moral education and work ethic, moved to how they participated in translanguaging practices, how they related phenotype to language use, the complex ways they understood and enacted masculinity, and concluded with the dual learning and social processes that developed their trajectories of identity. The salient points are that the boys became more proficient at the social practices involved with learning and valued the tech room as a space for developing those practices. This proficiency allows the boys to move from negative self-talk related to these learning practices to voicing enthusiasm for their learning progress.

I account for the development of various dimensions of their identity trajectories and connect them to learning practices using Wortham's (2006) and Wenger's (1998) concepts of models of identity, and identities in practice, respectively. Models of identity refer to, "either an explicit account of what some people are like, or a tacit account that analysts can infer based on

people's systematic behavior toward others" (Wortham, 2006, p. 6). While identities in practice are understood as, "defin(ing) who we are by the ways we experience our selves through participation as well as by the ways we and others reify our selves" (Wenger, 1998, p. 149). These accounts of systematic behavior and experience through participation are traced beginning with the cultural values and manual labor practices the boys learn within familial contexts.

The social identity formation I describe took place across the several months we met in the tech room but was also preceded by the boys acquiring cultural values and learning practices in their homes and communities. Values of correct social etiquette, loyalty, respect, and favoring commitment to familial ties over individual accomplishments were all aspects of the boys being *bien educado* in their home environments. Additionally, the manual labor practices the boys learned from the male individuals in their households modeled a strong work ethic and group work practices. The boys determined their identity trajectories by managing the tension between responsibilities to kin-centered commitments and self-directed digital literacy interests.

The boys used, and avoided using, language in certain ways that aligned with their lived experience and enacted models of identity. Most of the boys reported speaking Spanish in their homes and English at school, but even those who self-identified as monolingual English speakers were engaged in translanguaging practices across contexts. Evidence from this study suggests that leveraging these translanguaging practices in the tech room allowed the boys to incorporate their full linguistic repertoire in other settings. Still, some of the boys expressed confusion over the use of Spanish in multi-modal communications like email and text messaging, supporting the idea that they associate hegemonic English practices with digital/virtual spaces.

Models of identity at the local level also conveyed presuppositions about racial categories and phenotypes that had implicit connections to Spanish and English language use. The boys

reported instances where community members addressed them in Spanish based on their phenotype, i.e. “looking Mexican,” as well as times when Spanish-dominant practices were usurped by the power dynamics in having to communicate with a monolingual English “white boss.” These models also constructed a linguistically-related phenotypic spectrum and internalized colorism within the boys’ environments. Too dark or too light indicated English dominance or monolingualism, shades of brown were the phenotypic indicator for Spanish language use. Complicating these models and practices was the inferred prestige that Spanish language proficiency held for members of other non-dominant groups who practiced mock Spanish, without interpretations of covert racism.

The boys also engaged in discourses related to masculinity. Using a semiotic approach to gender relations, I understand masculinity in this context as a symbolic difference that occurs through practices among individuals, which yields certain effects. In the tech room, the boys’ exposure to hypermasculine YouTube videos, and heteronormative gaming practices circulated models that could be considered aggressive and misogynist. Their discussions about their female classmates also one-dimensionally positioned women as objects of contention. Complicating these masculine discourses were the boys’ own conceptions that acknowledged matriarchal authority and a broad range of acceptable masculine emotional expression.

Moving from social identity formations based in the home, community and publicly mediated models and discourses, I summarize the social learning processes the boys participated in while working together in the tech room. Based on a community of practice concept, the boys’ learning and social practices came to mutually constitute each other, meaning as they became more proficient at the digital literacy-related practice of their choosing, they also became more proficient at the social practices necessary to develop group membership.

These processes included becoming familiar with the learning space, learning practices, and each other. This familiarity developed over time and allowed the boys to practice increasing degrees of competence, which allowed them to work independently and interdependently. Their interdependent learning practices included collaboration and competition among the group members, during which they often expressed enthusiasm at their accomplishments. These patterns of enthusiasm are held in contrast the boys' initial expressions of negative self-talk and deprecation, and suggest the boys moving along an identity trajectory from insecure beginners to emergent digital literacy experts and adept social actors. The boys also placed value on the opportunities to develop these social practices, reporting strengthened social bonds among the boys across contexts, thus modifying their identities in practice.

The previous ethnographic account chapter addressed the learning processes that occurred as the boys formed a digital literacy community of practice and how it served as one point of social learning within their respective landscapes of practice. It also detailed how I functioned as a co-learner in their community of practice, learning from and with the boys. This chapter has taken as its focus the social dimensions of the boys' identity trajectories as learners, from voicing negative self-talk like, "I don't do computer smart," to valuing the social practices in the tech room and identifying as emergent technology experts. It provides an account of boys incorporated models of identity and identity in practice from the values and practices that connected their homes and families to their tech room learning and beyond. The ensuing, and final, ethnographic coda will provide an account of the tech room space as an educational borderlands.

CHAPTER 7: Ethnographic Coda

In Chapter One I mentioned that critical ethnography allows for the researcher to reflect on their positionality. Here I turn the lens back upon myself in an attempt to reveal how in my stance as a critical ethnographer I came to realize how I was unconsciously passing on the educational narrative from which I sought to free the boys. To reiterate the earlier point, I was assuming that the boys needed a way out, and that education would provide a path. In reflexively examining my role as a coordinator I realized that part of the message I was communicating to the boys was that their self-directed digital literacy practices were a vehicle for social mobility. Though I had first considered my pedagogical stance emancipatory, I later understood it as individualistic and counter to the collectivist cultural values and home practices of the boys. This final revelation is significant, because it was an important lesson for me and one that other critical educational ethnographers working with non-dominant groups may want to consider. The emancipatory vision that informs the researcher's intent may not have the same meaning for project participants. During our discussions there were times I touted the high salaries available to individuals in the tech sector, but it became increasingly clear that the boy's overriding concern was not personal advancement and success but supporting their families and communities.

Thinking through my positionality over the course of the dissertation project, there were three roles I feel I inhabited. The first was a coordinator, Freire (1973) used this term to describe the investigators working with culture circles to promote dialogue and I described this role in Chapters Three and Four in relation to the dialogue with the boys. This role is emancipatory in intent and strives for a more equal relationship between coordinator and participants. Later I understood my role to also include that of what Enrique Murillo terms a coyote (1999), shepherding boys across educational spaces. Historically this term is problematic, but I argue that

Murillo's use is a reappropriation of the term. The third was the role of colonizer (Villenas 1996). There were instances during our sessions where I privileged my own views, and the futures I imagined *for* the boys, over their own. In this way, I was attempting to supplant their cultural values in favor of those of the dominant group. I occupied these roles of coordinator, coyote, and colonizer throughout the study, at times simultaneously. The problem being that advocating for the boys to ignore their own cultural practices as a colonizer while trying to coordinate dialogue about the boys' transformative power in the world distorts the original critical pedagogical intent of the research. Ellsworth (1989) touches on this in her article, "Why Doesn't This Feel Empowering? Working Through the Repressive Myths of Critical Pedagogy". In it she offers a critique of how terms like empowerment have been (mis)applied in the corpus of critical pedagogy literature. The researcher's emancipatory intent is ultimately based on the experiences of the researcher, rather than those of the participant.

The term *coyote* was originally used to describe the individuals who smuggled undocumented immigrants northward through the harsh desert climate on U.S.-Mexico border³². Anthropologist Jason De León posits that, "The *coyote*-client relationship is ultimately about negative reciprocity, no matter how many adventures you share" (2017). However, Murillo reappropriates the problematic term when describing his plight as a first-generation higher education student. "Like a "mojado" [wetback] ethnographer, I attempt to cross the artificial borders into occupied academic territories, searching for a "coyote" [smuggler] to secure a safe passage (Murillo, 1999, p. 7). Here Murillo solicits guidance through unfamiliar educational borderlands. As such, the coyote in this context is not an exploitative figure but a helpful one,

³² See Luis Alberto Urrea's *The Devil's Highway* (2004) for an in-depth account of the historical use of the term and the synonym *pollero* (pp 60-68).

providing forms of capital, “to secure a safe passage”. For my purposes here, I understood Murillo’s reappropriation in similar terms.

I attempted to function as this type of coyote for the boys. In Chapter Four I described how I sought to provide forms of navigational capital as I am familiar with the practices and procedures necessary to cross similar (but not identical) liminal spaces, being a Latino male who has graduated high school and completed a four-year degree. I did this by listening to the stories of their own educational experiences as well as offering my own. In this way the storytelling via dialogue functioned as a form of shepherding, stories (*testimonios*) as a form of navigational capital. My understanding of my position deepened as I realized that I inhabited a role in the lives of the boys that many of my own mentors had inhabited in my own educational trajectory. I, like Murillo, had sought out formal and informal academic advisors that could provide direction and help me sustain my educational trajectory.

But if what I was doing was helping the boys move across an unfamiliar space, then what can be said about that space? The boys are crossing a liminal space from childhood to young adulthood and simultaneously crossing another liminal educational space from grade school to high school. I also began to understand that this concept of coyote fit into Gloria Anzaldúa’s Borderlands (1987) framework. Anzaldúa describes these Borderlands (upper-case B) as being, “physically present wherever two or more cultures edge each other, where people of different races occupy the same territory, where under, lower, middle and upper classes touch, where the space between two individuals shrinks with intimacy” (1987, p. 19). Applying the coyote metaphor, located on one side of these borderlands is the New Latino Diaspora where I first encounter the boys, with their own gaming and technology related social practices, and identities based in part on the cultural values of their home and communities. On the other side of this

border lie the origins of my motivations for the study, and aspirations for the boys. I acknowledged the boys' side, with funds of knowledge and commitment to a strong work ethic described in Chapter Six. At the same time, I endeavored to move them toward educational pathways that valued individual achievement, which in some ways complicated the boys' identity trajectories.

Through reflective and analytic memos I was writing as part of the ethnographic process, I identified my motivations as neoliberal in character. This is understood as, "a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets and free trade" (Harvey, 2005, p. 2). I identified three ways in which this had occurred. The first was –etic in nature, there was a pattern of me telling the boys things like, "This can get you ready for college and you'll get a high paying job. The more computer languages you know the more you'll get paid." At other times I used employee/employer analogies regarding their imagined futures. The second were the –etic utterances like Alex's, "Yo, can you believe people get paid for playing video games?" regarding his aspirations for e-sports described in Chapter Five. The third is what I would characterize as systemic, or the ideas that circulated in and around our sessions from without. Examples of this include advertisements for summer coding camps (at \$5,000 for a two-week stay) and news articles I show the boys about individuals their age being recruited for tech-related jobs and internships because of their expertise.

In privileging the "individual" in a capitalist context, I had set aside some the basis of what it meant to be *bien educado*, as described in Chapter Six. And there is more evidence of my middle-class blind spots in the family portrait in Chapter Three. I had pathologized Alex's home

environment in ways that I wasn't aware of at the time. I had allowed the discomfort of the moment to formulate value judgments about Alex's family members and home environment. I made the decision to leave that portrait in tact as part of the critical ethnographic process of reflection. The neoliberal utterances and value judgments I made were part of how I began to understand how I inhabited the third role, that of colonizer.

In her 1996 article, Sofia Villenas describes her experience of ethnographer as colonizer as, "the process by which she was being co-opted by the dominant English-speaking community to legitimate their discourse of Latino family education and child-rearing practices as 'Problem'" (p. 711). The instance of myself as a colonizing ethnographer was slightly different. My background, upbringing, and educational experiences had provided a basis for which I had internalized the values of the dominant culture at the expense of being *bien educado*. I had been shaped as a colonizer and it created a problem regarding the emancipatory intent I brought to the dissertation project. I had imagined futures for the boys and dangled the hope of lucrative tech career possibilities as motivation for their learning.

The question related to imagined futures, e.g., "what do you want to be when you grow up?", now seems an inherently individualistic question. Neither the boys nor I questioned the individualistic nature of self-directed learning (despite that it occurred in a community of practice setting), of coding, or the value placed on the career paths it opens. There were several instances when we talked about how these skills might enable them to find jobs in technology fields, i.e., becoming a coder, web designer, graphic artist, or draftsman. In two specific instances, our conversations centered around youth their age—growing up in very privileged economic circumstances—who were able to take advantage of either expensive technology-related summer camps or who had access to technology that allowed them to create mobile apps in their free time.

In both cases, it was clear that socio-economic barriers prevented the boys from having access to these opportunities.

Near the end of this critical ethnographic process I questioned my positionality throughout the dissertation project and was concerned that I had missed an opportunity. Must a Chicano ethnographer, or Mexican-origin boys have to choose between the family values of being bien educado or socioeconomic mobility associated with individualistic career pursuits? Surely these aren't mutually exclusive. As I kept in touch with most of the boys in the months after the study formally concluded I was alarmed that some of them were voicing a preference for helping their family economically by working rather than pursuing a higher education trajectory.

In late 2014 I was sitting in a barber's chair in Center City, Philadelphia, when I got the phone call. My dad had had a heart attack and stroke. The room spun. Nothing was more important than being with family at that moment. A few weeks later, my partner and I drove a moving truck 2,000 miles back to El Paso, Texas. After a four-year absence, I was curious about how the border town had changed and not changed. Those first few months back home, I found myself *recorriendo las calles*, running the streets. Literally at first, running a few miles here and there through old, familiar neighborhoods, the lack of shade, the heat reflecting off the asphalt. Later via bike and car, doing parallels, up and down the adjacent streets, never quite sure why I was spending so much time, sometimes day after day, doing this.

I also began to look up old friends, former high school cross country and summer track teammates I hadn't had contact with in a decade or more. I found a couple serving long jail stints in federal and state prisons. Others, too damaged over the years by life's agonies to offer anything other than a brief return text message hello with no further follow up. Another, the best off I could find, had become a military man, career Army. We spent the time we had when I wasn't

writing and he wasn't attending to his family duties, back on the roads and the track, one footfall at a time. Later, it occurred to me later I'd spent all that time *recorriendo las calles* not because I was looking for changes, but because I was looking for myself, or some evidence that I had and still existed in that place. I'm not sure I ever found an answer but I know it provided a valuable lesson. In certain moments, logic and reason can escape the superficie of the act, and in those moments we are sometimes searching for some evidence of ourselves.

Behar, in *The Vulnerable Observer* (1996) describes the boundary she crosses so often in her work between the ethnographic and the autobiographical. She argues that a good deal of social science research is carried out for personal reasons, infused with degrees of subjectivity. So why would I devote so much time in fieldwork and writing to the lives of eight Mexican-origin boys? Was I searching for some evidence of, or answers for myself? Perhaps. More likely, I began by trying to understand the factors that allowed me the privilege of doing the coursework, research, fieldwork, and writing, when so many other talented young men, who came from where I came from, who ran the same streets with me, now lived in cells or in dire economic situations.

Then, the epiphany- by making the choice to return home to El Paso from Philadelphia I had privileged my own family values over what I believed to be the individualistic career motivations of remaining and completing the doctoral degree as soon as possible. This was parallel to the boys that had begun voicing their concerns for their own families' well being in favor of higher education or career-related aspirations! Yet, I have labored in relative isolation for the past years through data analysis and drafting the document you are presently reading. Being bien educado and highly educated are not mutually exclusive. The boys don't have to choose one at the expense of the other.

In the years since we held our last CEC tech room session, I have maintained contact with five of the original eight boys who participated in the dissertation project. If you've read this far, then hopefully you'll be pleased to know that of those five, four have graduated from high school and one will graduate this year. Three of them are enrolled in the local community college. They are funny, articulate, and kind. And they continue to teach me even as I draft the final pages of this critical ethnographic project. Coordinator, Coyote, and Colonizer, perhaps. But I would like to add another possibility to the list. Compadre (friend).

CHAPTER 8: Discussion

In the introduction to this dissertation I argued that a critical ethnographer can function as a coordinator of learning in a third space setting, and in doing so provides opportunities for participants like the boys with whom I worked to explore their imagined futures and educational trajectories. Further, I contended that the boys engaged in extant digital literacy practices not recognized as learning assets by standardized institutional measures, skills that can be cultivated in a community of practice context. And, I held that cultural values and learning practices acquired in the home contributed to the boys' developing understanding of themselves as emerging digital literacy experts. These arguments were laid out over the course of describing my ethnographic approach, and the preceding ethnographic account chapters. Here, I summarize the main points of those chapters and offer some direction for my agenda moving forward with this strand of research.

In chapter four, I set out to answer the following questions: In a community of practice facilitated by a critical Xicanx ethnographer, how do the boys as emergent technology experts formulate narratives about their educational trajectories and imagined futures relative to their technical and social practice skills development, as well as their current lived experience?, and; By relating praxis to the boys' learning and educational trajectories, how does a critical Xicanx ethnographer function as what Freire describes as a coordinator? During our critical media literacy exercises, the boys demonstrated an ability to deconstruct the social inequities they observed in *The Hunger Games*. They connected school-based lessons about social class into our filmic analysis. They also compared the class structure to their own lived experience, and in doing so made a problematic distinction about their position as middle-class. The boys shared insights about the film supported by evidence while making inferences. They later used these

skills as we entered into conversations about how they understood navigating their life from the present to their imagined futures.

Their first formulations in narrating their imagined futures were unsure. When they reported being asked what they, “would like to be when they grow up,” by teachers and counselors, they primarily expressed interest in going to college or participating in the military. Later, the boys began to connect their emerging tech expertise with the possibility of pursuing a career in technology, however they remained uncertain of how to navigate available educational pathways to arrive at such an imagined future. I functioned as a coordinator, facilitating dialogue with the boys about how to identify and possibly overcome socially inequitable situations. Then, I took a more direct role when the boys voiced concerns about high school and college. I explained what to expect regarding high school course choices, standardized testing, and the financial responsibilities required for college completion. These were forms of navigational capital I provided with the intention that the boys would be able to overcome obstacles by using this information as part of advocating for themselves.

However, my role as a coordinator or institutional agent was limited, and necessarily augmented by the support the boys received from engaged teachers and counselors. These other institutional agents provided access and exposure to college-going trajectories by placing them on preparatory tracks and organizing visits to higher education institutions. Near the end of the study the boys appeared a bit more hopeful and less uncertain about their futures, having acquired aspirational and navigational capital that made more educational pathways available to them. Also included in chapter four was an explanation of the process of *metiendo manos*, or making a commitment and taking risks when faced with an educationally related limit situation.

In chapter five I asked the following: In a third space setting, how do Latino middle school boys learn digital literacy skills while collaborating as a community of practice? How do the boys' extant digital literacy practices enable participation in a community of practice in order to develop new digital literacy skills? And how do the positionalities of the researcher and the participants enable learners to take up new practices as domains of emergent expertise?

I answered these questions by first documenting how the boys arrived at the tech room with their own sets of digital literacy skills. The CEC tech room served as one point in a landscape of their various communities of practice that allowed the boys to learn and socialize in ways that contributed to their self-directed interests in digital literacy learning. Together the boys valued each other's skill sets and shared them among each other, thereby enhancing the skill sets of the entire group. Legitimate peripheral participation occurred as the boys applied the practices they use with gaming console and mobile devices to the hardware, software, and interfaces found in the tech room. Further, they connected other extant practices found in the school, home, and community settings with the practices in the tech room.

The research design privileged a coordinator-participant model of learning interaction over a traditional teacher-student model, and the boys were able to position themselves as developing emergent forms of expertise. I co-learned with the boys, as they instructed me at certain points and I modeled close reading and problem-solving methods for them. There were also instances when I was unable to appreciate or solve certain issues. This set boundaries on what our tech room community of practice was capable of achieving. However, as a node of connected learning and a point in a landscape of practice, it allowed the boys to establish a new set of digital literacy skills and identities as learners who could continue to develop their skills within their larger landscape of practice.

In chapter six I addressed the boys' identity formulations and processes of social practice. I asked, how do these young Latino males draw from previously acquired cultural values and learning practices as they engage in learning within the digital literacy community of practice? How do they negotiate their identities relative to discourses of language, race, and masculinity? And, what pertinent social processes shape their emerging sense of themselves as digital literacy experts and members of a group of learners?

I described how the boys and their families value moral education, how they translanguaged and related phenotype to language use, the ways they understood and enacted masculinity, and concluded with the learning and social processes that developed their trajectories of identity. The salient points being that the boys became more proficient at the social practices involved with learning and valued the tech room as a space for developing those practices. This proficiency allowed the boys to move from negative self-talk related to these learning practices to voicing enthusiasm for their learning progress.

I accounted for the development of their identity trajectories and learning practices using Wortham's (2006) and Wenger's (1998) concepts of models of identity, and identities in practice, respectively. These accounts of behavior and experience through participation are traced through the cultural values and manual labor practices the boys learn within familial contexts. Their families valued social etiquette, loyalty, respect, and favoring commitment to familial ties over individual accomplishments as qualities of being *bien educado*. Additionally, the manual labor practices the boys learned modeled a strong work ethic and group work practices. The boys determined their identity trajectories by managing the tension between responsibilities to kin-centered commitments and self-directed digital literacy interests.

The boys used, and avoided using, language in certain ways. However, those who self-identified as monolingual English speakers also engaged in translanguaging practices across contexts. Some of the boys expressed confusion over the use of Spanish in multi-modal communications like email and text messaging, supporting the idea that they associate hegemonic English practices with digital/virtual spaces. The boys reported instances when they were addressed Spanish based on their phenotype, i.e. “looking Mexican,” as well as times when Spanish-dominant practices were usurped by the power dynamics in having to communicate with a monolingual English “white boss.” This created a model of a linguistically related phenotypic spectrum and internalized colorism. Too dark or too light indicated English dominance or monolingualism, shades of brown were the phenotypic indicator for Spanish language use. Complicating these models was the inferred prestige that Spanish language proficiency held for members of other non-dominant groups who practiced mock Spanish, without interpretations of covert racism.

Related to masculinity, the boys’ exposure to hypermasculine YouTube videos and heteronormative gaming practices circulated models that could be considered aggressive and misogynist. Their discussions about their female classmates also one-dimensionally positioned women as objects of contention. Complicating these masculine discourses were the boys’ own conceptions that acknowledged matriarchal authority and a broad range of acceptable masculine emotional expression.

Over time, the boys’ learning and social practices came to mutually constitute each other; meaning as they became more proficient at the digital literacy-related practice of their choosing, they also became more proficient at the social practices necessary to develop group membership. They became familiar with the learning space, learning practices, and each other. And this

familiarity allowed the boys to practice increasing degrees of competence, which allowed them to work independently and interdependently. Their interdependent learning practices included collaboration and competition, and they often expressed enthusiasm at their accomplishments. These patterns of enthusiasm are contrasted with the boys' initial expressions of negative self-talk, and suggest the boys moved along an identity trajectory from insecure beginners to emergent digital literacy experts and adept social actors. The boys also valued the opportunities to develop these social practices, reporting strengthened social bonds among the boys across contexts, thus modifying their identities in practice.

These accounts are important for several reasons. Latinx communities across the U.S. are growing in both size and number and Latino males continue to fall behind their peers in completion of secondary and higher education. This means that there is a growing number of young men in danger of being siphoned off of the K-12 and K-16 educational pipelines. From a critical perspective, these young men may not be able to accumulate forms of knowledge or social capital as their peers from other demographic groups. From a capitalist/economic perspective, it means that a larger segment of the U.S. population in the future will be less prepared to integrate into an information-age workforce. By attending to the technology related forms of learning the boys are already practicing, and allowing them to develop further practices in a third space setting, new formulations of young Latino males can be made researchers and the participants themselves. And, in focusing on individuals who are neither categorized as high achieving or academically at-risk, this project repositions young Latino males as self-efficacious learners with a degree of autonomy not readily available in institutional settings.

While I was satisfied with the ethnographic accounts, there were limitations of time and setting(s) that prevented definitive long-term conclusions to be drawn based solely on this study. I

would have liked to have followed the boys through to the completion of a higher education degree, or if their educational trajectories took them in another direction, to have followed through on that. I also would have liked to have been more directly involved in their home and school settings. While I was able to visit and observe occasionally, the primary research site remained the CEC tech room. An intercontextual approach incorporating firsthand accounts of the boys learning practices may have illuminated other findings not present in the above accounts. I also caution that these accounts do not suggest digital literacy practices are panacea for socioeconomic marginalization. Alondra Nelson (2017) describes how this narrative is problematic and can possibly exacerbate the inequalities coding initiatives aim to solve.

Moving forward with this strand of research I would like to integrate indigenous approaches to education and Chicana Feminist Epistemologies into the conceptual framework. On April 28, 2017, an AERA Presidential Session was convened in San Antonio, Texas, titled, “Genealogies of Indigenous Research: Leadership and the Making of Educational Opportunities”. Participants included Bryan Brayboy, Megan Bang, and Eve Tuck, among other indigenous scholars. The purpose of the session was to highlight how “indigenous ways of knowing and doing” have been passed from one generation of senior scholars to the next. In listening to the participants, I became aware of the importance of intergenerational epistemological sustainability. I realized that this approach to research could be especially helpful when applied to critical ethnographers working with Latinx youth. By focusing on how cultural values can be sustained from one generation to the next in the context of education, there is less likely to be a disconnect between what critically-minded researchers may consider “emancipatory” and the priorities of research participants.

Further, in alluding to the work of Ruth Behar in the Coda above, I find that much of what she describes in *The Vulnerable Observer* resonates with what is found in work on Chicana feminist epistemologies by individuals like Anzaldúa, Moraga, Castillo, and Villenas in regards to confianza, or trust, and the “inscription of the self” (Behar, 1996, p. 20). That is, by bringing in our own approaches and methodologies, we transform (the) theorizing space. (Anzaldúa, 1990, p. xxv). A chief motivation for this study as part of a research strand is to contribute to the body of work by Latinx scholars, *about* Latinx communities, for the purpose of transforming the methodology of critical ethnography.

The implications for this research are broad. Anthropologically, this work builds upon historically recent critical ethnographic methodology that requires reflexivity on the part of the researcher. There is also an element of transparency with the participants regarding the research process, which I attempted to document throughout the study. Educational researchers will find the approach to guided dialogue and self-directed digital literacy practice a useful starting point for similar projects aiming to study the learning of groups of individuals from non-dominant backgrounds. And, Latinx Studies scholars can build upon this work by theorizing and problematizing how Latinx researchers work with Latinx participants when they come from similar but not identical backgrounds. Taken together, this study provides an account of a group of Mexican-origin boys coming to a fuller understanding of themselves through digital literacy learning, and hopefully broadens our understanding of the experiences of Latino boys and education.

APPENDIX

Fieldnotes Excerpt:

June 21, 2009

First visit to Marshall Soccer League (as sanctioned by Eastern Pennsylvania Soccer Association)

Location: Fields at East Marshall Middle School

I arrived at the fields at 7:50am. The sky was overcast with passing light showers. There were 20-30 cars in the parking lot as well as two tables set up with concessions (I would later find out the concessions are run by some of the players wives and sold everything from sodas, water, and sports drink to tostadas and tacos with chicken, avocado and cheese . . . mango sprinkled with powdered chile, small bags of diced fruit and there were large aluminum pots – the contents of which I never discovered) and two or three ladies were gathered at each.

I approached two men standing by the walkway to the fields and asked where I might find JC. One man introduced himself as RC, the other was JC. JC looks to be in his late 40s or early 50s and is about 5'7" with cinnamon skin, salt & pepper hair, and a deep vertical crease between his eyebrows. He was wearing a white polo shirt with an embroidered logo, which read "Marshall Soccer League". He also wore a black braided rosary outside of his shirt. RC is the captain of one of the teams, Los Delfines. He's about 5'6" with a stocky but fit build, in his mid-thirties. RC asked if I was a new player, and before I could answer, he explained he only had 13 players and one is on suspension for accumulating 3 yellow cards (11 players are needed to field a team), as JC had asked me to bring my cleats, I replied I could play. RC told me the Delfines would play at 2pm and to be on the field around 1:30pm.

I walked with JC and RC to one of the two fields, as simultaneous games were beginning at 8am. Coming from Philly, he asked how I was associated with Norristown. I explained I work in the schools with parents and had been working with Maria F. at MMS. Raul's eyes lit up and he said his children go to MMS, and commented on what a great teacher Maria was, specifically, how helpful she is to the parents. JC acknowledged he has known Maria and her family since they all lived back in Acapulco, although they are no relation. JC is a businessman, he owns a landscaping company as well as Marshall Grocery, located at 201 E. Hamilton St. He says with some luck he is going to open up another store on Main Street. JC arrived in Marshall in 1992 after spending some time in California. He is the main organizer of the league (as evidenced by his spiffy shirt), which is now in its 10th year of existence.

By this time we are standing at the sidelines of a game already in progress, I'm impressed by the level of organization, each team dresses in the full outfit (jersey – or casaca, shorts and socks) of various professional club teams, so at any given moment it looks like a Mexican team is playing an English team, etc. Also, the referees are brought in by the federation, and are professionally dressed. When I ask JC about the makeup of the league he says about 95% are Mexican, the other five percent being white, Black and Asian. He mentions one team even has a player who used to play semi-professionally in Denmark.

As we talked more about Marshall schools, JC mentioned he has a son who is about to begin 9th grade at the high school. He expresses a deep concern because of harassment of the Mexicans by the Blacks and amongst the Mexicans there is gang activity at the high school. He wishes he could move so that his son could go to a better school.

He talked a little bit about why he started the league and the benefits of the league. One of them being that it keeps the guys in line, they won't go out drinking on Saturday night if they know they have a game on Sunday morning, and they won't drink after their game because they have work on Monday. Unfortunately, there is only an adult league, and JC says he'd like to start up a youth league. He already trains some kids, but lack of an organized league means there are occasionally 15-16 year olds playing on the men's teams. He'd like to develop a youth league to keep the kids out of trouble, to give them something to do. JC complains that there isn't a lot of city or greater community support as evidenced by lack of facilities. Even though there are parks, there are no recreational facilities dedicated to soccer, baseball, volleyball, etc., and this is why they have to play at a middle school. The league has to pay the district to use these two fields, JC remarks that the district refers to this fee as a donation, and it's easy to see he's annoyed at this. He mentions he even reseeds the fields at the end of the season. He says there are as many as 25 men's teams, but due to facility restrictions only 14 can be sanctioned by the league. With more fields the league could grow and accommodate previously unsanctioned teams.

There are many possibilities, JC suggests. With so many players, a select squad of 20 could be chosen and arrangements could be made for an exhibition game with a professional team in Marshall (he mentions a stadium, I'm guessing at the high school), Maria's sisters could have their dancers perform, and dance could even be held after the game. He seems very enthusiastic as he imagines this scenario.

JC, RC and I stood in the light rain watching the first game, Queretaro vs. Costa (JC explains it's called Costa because most of the players come from the Acapulco area). As players and fans arrive and leave they all greet JC and wish him and RC a happy Father's day. RC asks if I'm a father and seems really surprised when I say that I'm not. I'm not sure what year RC arrived here but he says his mom arrived here in 1993 and worked for a company called Murray. He says relations between the Black and Mexican community used to be really bad, but they've gotten better. Unfortunately he doesn't elaborate much more than that. RC had been listening as JC described his frustration with the city despite such a large Mexican population. He compared the lack of collective Mexican community organization with his experience living in California. He says there are community leaders such as JC and Maria F., who have large social networks. He explains that in California, if there was a common objective it was only necessary to reach out to 5 or 6 of these leaders and they could communicate that objective to their respective networks. Here in Marshall, groups are splintered, which makes organizing difficult to impossible. JC interjects and asks me to imagine 25 teams each with rosters of 15-20 players, each with a wife and 2-3 kids. Just imagine how many people that is, he says, implying the potential political power therein.

As the day progresses the crowds grow. JC is called away to deal with referee evaluations. RC leaves and agrees to meet me at 1:30. One game ends and a second begins, Real Deportivo (with their very accomplished and very tall star Dane player) vs. San Nicolas. I leave at half-time for lunch. Based on the level I play I witnessed I decide to go to the soccer store on Marshall St. and invest in a pair of shinguards. I'm just as impressed with the store, an array of jerseys and a large inventory of shoes, balls and other accessories. There is obviously an established demand for such products, and it is a good example economic prosperity within a specific group.

I return to the fields at 12:30, where Jalisco vs. Los Zorros is in progress. These are definitely the largest crowds of the day, upwards of 70 spectators watching one game and 50 watching another. Mostly families, some sit on the small aluminum bleachers, others in lawn chairs or standing. It could be these are larger than normal crowds due to Father's day. Interestingly, not all of the spectators are Mexican, there is a sprinkling of 5 or 6 white people at each game who seem to be from the surrounding neighborhood. Also, a few of these teams have black players

and white high school age players. It's encouraging to see how sport can bridge a perceived ethnic divide.

I see JC on the sidelines again, and he tells me that this is how he spends his Sundays. He says as the chief organizer he has a responsibility to make sure fights don't break out and that spectators don't bring alcohol to the games. When I ask if his son plays soccer, he tells me he has two, and neither is interested in soccer or sports in general, even though they are good athletes. He uses his hands to mimic a video game controller and smirks.

As 1:30 approaches I take in the community-building aspect of the atmosphere, crowds cheering, people trickling back and forth from the concession tables – their hands full with drinks and snacks, children ignoring the matches in favor of their own games. I infer that all of this enthusiasm is based on the respite from the work week for players and spectators alike. I see RC approaching the field now dressed in his jersey. I find out we'll be playing the defending league champions. My anxiety is noticeable. Some of the Delfines players arrive and RC introduces me. Everyone refers to each other by nicknames for the most part. There's Carlos (mi tocayo, or namesake) - the 15yr old who goes to Marshall High School, Victor - who is referred to as Chipote (bump or lump, from his head), Pinky, who's real name I don't know – has large teeth that protrude outward (based on the cartoon character from "Pinky and the Brain"), Faustino (Tiny), our goalie Monstro, Chicken Little (still no conclusive explanation). The player who is suspended lends me his jersey, shorts and shirt, and I start as a right midfielder.

The strategy is to play defensively and rely on counterstrikes for goals. RC senses my nervousness, pulls me aside and tells me to play with energy and confidence. By 2pm it's sunny and humid. Not having played an organized soccer game in 12 years, I'm taken aback by the intensity level of the game . . . the guys are enjoying themselves, but are not holding back . . . after two or three full sprints to help the defense I'm just hoping I don't vomit in front of the 50 or so spectators. And, even though they don't know me, the spectators are not shy with their opinion, but can only refer to me as "Numero 12", as in "Why are you just standing there #12?" At halftime we've managed to hold the defending champs to a 0-0 tie and the guys are starting to trust my ball-handling skills by passing to me more often, despite a terribly muddy and slick field. The coach is a guy in his thirties with a large belly. He is chain smoking and instructing us from the sideline. He tells me I'm doing fine and to keep concentrating on defense before we go out for the second half. We do have one extra player and he tells me if I need to sub just to signal. There is a large (6'3", 220lbs) Black forward (Larry) playing on the other team and I do my best to help the defender behind me cover him, but Larry kicks really hard and I have the marks to prove it. At about 75 minutes RC asks me if I want to sub and the decision was the easiest of the day. I exit the far side of the field and jog around the goal to the bleachers. We squandered a couple of opportunities to score on counterstrikes and heartrendingly lose 1-0 with the other team literally scoring in the last minute of injury time. Despite the loss, everyone seems pleased with the showing against the top-ranked team. There is a palpable sense of camaraderie, players cracking jokes about each other playfully. I feel like it is very positive first step in gaining the trust of the guys, and a step that wouldn't have been possible as solely a spectator. Tiny and Chicken Little ask how I liked playing with them, and I told them I had a great time, I just wish I was in better shape. They tell me it will come, especially since league play extends until November.

I change out of the jersey and shorts and thank the suspended player for lending them to me. I also find JC and thank him for introducing me to the Delfines. I explain as part of my school work I am writing a story about the Mexican community in Marshall. I ask him if he'd be interested in doing an interview and talking in more depth about his experience in Marshall, his ideas for community-building and so forth, he agrees and tells me to call him during the week to set up a time. RC is also amenable to doing an interview, he seems eager to share his thoughts on how

the Mexican community in Marshall is splintered, I get his phone number and agree to call him this week as well.

All told, I feel like it's a good start in getting to know the male members of the Mexican community. Seeing as "work" is an emergent theme, I'd like to keep in mind some topics to ask the guys about. For example: the recent raids on workplaces; the frequency, volume, importance of remittances to Mexico and the subsequent impact of their long-term plans in Marshall (if any). It's 4pm, I'm spent, I buy a bottle of water from one of the ladies at the concession table and agree to play the week after next.

BIBLIOGRAPHY

- Allard, E. C. (2013). Latecomers in the new Latino diaspora (Doctoral dissertation). Philadelphia, PA: University of Pennsylvania. Retrieved from <http://repository.upenn.edu/dissertations/AAI3565015>
- Alexander, B. K. (2003). Fading, twisting, and weaving: An interpretive ethnography of the Black barbershop as cultural space. *Qualitative Inquiry*, 9(1), 105-128.
- Alvermann, D. E., & Hagood, M. C. (2000). Critical media literacy: Research, theory, and practice in "New Times". *The Journal of educational research*, 93(3), 193-205.
- Anderson, G. L. (1989). Critical ethnography in education: Origins, current status, and new directions. *Review of educational research*, 59(3), 249-270.
- Anzaldúa, G. (1987). *Borderlands / La Frontera: The New Mestiza*. San Francisco: Aunt Lute Books.
- Anzaldúa, G. (1990). Haciendo Caras/making face, making soul: creative and critical perspectives by women of color. *San Francisco: Aunt Lute*.
- Appadurai, A. (1996). *Modernity at Large: Cultural Dimensions of Globalization*. Minneapolis: University of Minnesota Press.
- Auerbach, S. (2001) *Under co-construction: parent roles in promoting college access for students of color* (unpublished doctoral dissertation). University of California, Los Angeles.
- Ávila, J., Pandya, J. Z., (2013). *Critical digital literacies as social praxis: Intersections and challenges*. New York: Peter Lang Publishing.
- Bandura, A. (1977). Self-efficacy: Toward a Unifying Theory of Behavioral Change. *Psychological Review*. 84(2), 191-215.
- Bandura, A. (2006). Adolescent development from an agentic perspective. In A. Bandura (Ed.), *Self-efficacy beliefs of adolescents* (pp. 1-43). Greenwich, CT: Information Age Publishing.
- Basch, L., Glick Schiller, N., & Szanton Blanc, C. (1994). *Nations Unbound: Transnational Projects, Postcolonial Predicaments and Deterritorialized Nation States*. New York: Routledge.
- Behar, R. (1996). *The vulnerable observer: Anthropology that breaks your heart*. Boston, MA: Beacon Press.
- Bezemer, J., & Kress, G. (2016). *Multimodality, learning and communication: A social semiotic frame*. New York: Routledge.
- Bhabha, H. K. (1994). *The Location of Culture*. New York: Routledge
- Carrillo, J.F. (2010). Teaching that Breaks Your Heart: Reflections on the Soul Wounds of a First Year Latina Teacher. *Harvard Educational Review*, 80 (1), 74-80.
- Carspecken, F. P. (2001). *Critical ethnography in educational research: A theoretical and practical guide*. New York: Routledge.
- Castellanos, J., Gloria, A. M., & Kamimura, M. (Eds.). (2006). *The Latina/o Pathway to the PhD: Abriendo Caminos*. Sterling, VA: Stylus.
- Cole, M. (1996). *Cultural psychology: a once and future discipline*. Cambridge, MA.: Harvard University Press.
- Cole, M., & Engeström, Y. (1993). A cultural-historical approach to distributed cognition. *Distributed cognitions: Psychological and educational considerations*, 1-46.

- Connell, R. W. (1995). *Masculinities*. Berkeley, CA: University of California Press.
- De Fina, A. (2003). *Identity in Narrative: A study of immigrant discourse* (Vol. 3). Philadelphia: John Benjamins Publishing Company.
- De León, J. (2017, June 28). Smugglers [Web log post]. Retrieved from <https://culanth.org/fieldsights/smugglers>
- Delgado-Bernal, D. (1998). Using a Chicana feminist epistemology in educational research. *Harvard Educational Review*, 68(4), 555-583.
- Delgado-Gaitan, C. (1992). School matters in the Mexican-American home: Socializing children to education. *American Educational Research Journal*, 29(3), 495-513.
- Delgado-Gaitan, C. (1994). Consejos: The power of cultural narratives. *Anthropology & Education Quarterly*, 25(3), 298-316.
- Duncan-Andrade, J. M. R., & Morrell, E. (2008). *The Art of Critical Pedagogy: Possibilities for moving from theory to practice in urban schools* (Vol. 285). New York: Peter Lang Publishers Incorporated.
- Duranti, A. (2010). Husserl, intersubjectivity and anthropology. *Anthropological Theory*, 10(1-2), 16-35.
- Ellsworth, E. (1989). Why doesn't this feel empowering? Working through the repressive myths of critical pedagogy. *Harvard educational review*, 59(3), 297-325.
- Emerson, R. M., Fretz, R. I., & Shaw, L. L. (1995). Writing ethnographic fieldnotes. *Chicago, IL: University of Chicago*.
- Félix-Ortiz, M., Ankney, I., Brodie, M., & Rodinsky, H. (2012). Anchoring the Measurement of Machismo and Latino Male Identity in Contemporary Definition and Theory. In (Eds.) P. Noguera, A. Hurtado, & E. Fergus (Eds). *Invisible No More: Understanding the Disenfranchisement of Latino Men and Boys*. New York: Routledge.
- Finn, J. D., & Rock, D. A. (1997). Academic success among students at risk for school failure. *Journal of applied psychology*, 82(2), 221.
- Flores, A. (2017). *How the U.S. Hispanic Population is Changing*. Retrieved from Pew Research Center website: <https://www.pewresearch.org/fact-tank/2017/09/18/how-the-u-s-hispanic-population-is-changing/>
- Flores, N., & García, O. (2013). Linguistic third spaces in education: Teachers' translanguaging across the bilingual continuum. *Managing diversity in education: Key issues and some responses*, 243-256.
- Flores, W. V., & Benmayor, R. (Eds.). (1997). *Latino cultural citizenship: Claiming identity, space, and rights*. Boston, MA: Beacon Press.
- Foley, D. E. (1990). *Learning capitalist culture: Deep in the heart of Tejas*. Philadelphia: University of Pennsylvania Press.
- Foley, D. (2004). Ogbu's theory of academic disengagement: its evolution and its critics. *Intercultural Education*. 15(4), 385-397.
- Foucault, M. (1971). *The order of things: An archaeology of the human sciences*. New York: Pantheon.
- Foucault, M. (1977). *Discipline and punish: The birth of the prison*. New York: Pantheon.
- Freire, P. (1973). *Education for Critical Consciousness*. New York: Continuum.
- Freire, P. (1970). *Pedagogy of the Oppressed*. New York: Continuum.
- Gándara, P. (1982). Passing through the eye of the needle: High-achieving Chicanas. *Hispanic Journal of Behavioral Sciences*, 4(2), 167-179.

- Gándara, P. (1995). *Over the ivy walls, the educational mobility of the income Chicanos*. Albany: State University Press of New York.
- García, O. (2009). Education, multilingualism and translanguaging in the 21st century. *Social justice through multilingual education*, 140-158.
- García, O. (2011). *Bilingual education in the 21st century: A global perspective*. New York, NY: Wiley.
- Gee, J. P. (2015). *Literacy and education*. New York: Routledge.
- Geertz, C. (1973). *The interpretation of cultures* (Vol. 5019). New York: Basic books.
- Geuss, R. (1981). *The idea of a critical theory: Habermas and the Frankfurt School*. Cambridge University Press.
- Gibson, M. A., & Ogbu, J. U. (1991). *Minority Status and Schooling: a comparative study of immigrant and involuntary minorities*. New York: Garland Publishing.
- Goodwin, M. H. (1990). *He-said-she-said: Talk as social organization among black children*. Indianapolis: Indiana University Press.
- González, N. (1999). What Will We Do When Culture Does Not Exist Anymore? *Anthropology & Education Quarterly*. 30(4), 431-435.
- González, N., Moll, L., & Amanti, C. (Eds.) (2005). *Funds of Knowledge: Theorizing Practices in Households, Communities, and Classrooms*. New Jersey: Lawrence Erlbaum Associates.
- Gutiérrez, K.D. (2008). Developing a sociocritical literacy in the third space. *Reading research quarterly*, 43(2), 148-164.
- Gutiérrez, K.D., Baquedano-López, P., & Tejeda, C. (1999). Rethinking diversity: Hybridity and hybrid language practices in the third space. *Mind, culture, and activity*, 6(4), 286-303.
- Gutiérrez, K.D., Baquedano-López, P., & Turner, M. (1997). Putting language back into language arts: When the radical middle meets the third space. *Language Arts*, 74(5), 368-378.
- Gutiérrez, K. D., Morales, P. Z., & Martinez, D. C. (2009). Re-mediating literacy: Culture, difference, and learning for students from nondominant communities. *Review of research in education*, 33(1), 212-245.
- Gutiérrez, K.D., & Rogoff, B. (2003). Cultural Ways of Learning: Individual Traits or Repertoires of Practice. *Educational Researcher*. 32(5), 19-25.
- Gutiérrez, K.D., Rymes, B., & Larson, J. (1995). Script, counterscript, and underlife in the classroom: James Brown versus Brown v. Board of Education. *Harvard educational review*, 65(3), 445-472.
- Gutiérrez, K. D., & Stone, L. D. (1997). A Cultural-Historical View of Learning and Learning Disabilities: Participating in a Community of Learners. *Learning Disabilities Research and Practice*, 12(2), 123-131.
- Habermas, J. (1972). *Knowledge and human interests*. New York: Wiley.
- Hacking, I. (1990). Two kinds of "new historicism" for philosophers. *New Literary History*, 21(2), 343-364.
- Hamann, E. T., Wortham, S., & Murillo, E. G. (2002). In S. Wortham, E. G. Murillo, & E. T. Hamann (Eds.) *Education in the New Latino Diaspora: Policy and the Politics of Identity*. Westport, CT: Ablex Publishing.
- Hammersley, M., & Atkinson, P. (2007). *Ethnography: Principles in practice*. Routledge.
- Harper, S. R., & Williams Jr, C.D. (2014). *Succeeding in the city: A report from the*

- New York City Black and Latino male high school achievement study. *Center for the Study of Race and Equity in Education*.
- Harvey, D. (2005). *A Brief History of Neoliberalism*. New York: Oxford University Press.
- Heath, S. B. (1991). "It's about winning!": The language of knowledge in baseball. In L. B. Resnick, J. M. Levine, & S. D. Teasley (Eds.), *Perspectives on socially shared cognition* (pp. 101-124). Washington, DC, US: American Psychological Association.
- Heller, M. (1982). Negotiations of language choice in Montreal. In J. Gumperz (ed.) *Language and Social Identity* (pp. 108-118). New York: Cambridge University Press.
- Hill, J. H. (1998). Language, race, and white public space. *American anthropologist*, 100(3), 680-689.
- Holland, D., & Lave, J. (2001). *History in person: Enduring struggles, contentious practice, intimate identities*. Santa Fe, NM: School for Advanced Research Press.
- Huerta, A. H., McDonough, P. M., & Allen, W. R. (2018). "You can go to college": Employing a developmental perspective to examine how young men of color construct a college-going identity. *The Urban Review*, 50(5), 713-734.
- Husserl, E. (1970). *Crisis of European Sciences and Transcendental Phenomenology*. Evanston: Northwestern University Press.
- Ito, M., Gutiérrez, K., Livingstone, S., Penuel, B., Rhodes, J., Salen, K., ... & Watkins, S. C. (2013). *Connected learning: An agenda for research and design*. BookBaby.
- Inda, J. X., & Rosaldo, R. (Eds.). (2008). *The Anthropology of Globalization: a reader*. Oxford, UK: Blackwell Publishing, Ltd.
- Jackson, J. L., Jr. (2013). *Thin Description*. Cambridge, MA: Harvard University Press.
- Kafai, Y. B., & Burke, Q. (2014). *Connected code: Why children need to learn programming*. Cambridge, MA: Massachusetts Institute of Technology Press.
- Kendi, I.X., (2016, October 20). Why the academic achievement gap is a racist idea. *African American Intellectual History Society*. Retrieved from <https://www.aaihs.org/why-the-academic-achievement-gap-is-a-racist-idea/>
- Kress, G. (1997). Multimodal texts and critical discourse analysis. In *Proceedings of The First International Conference on Discourse Analysis. Edições Lisbon: Colibri* (pp. 367-383).
- Kress, G. (2000). Multimodality. *Multiliteracies: Literacy learning and the design of social futures*, 2, 182-202.
- Kress, G. (2011). 'Partnerships in research': multimodality and ethnography. *Qualitative Research*, 11(3), 239-260.
- Kress, G. & Street, B. (2006). Foreword. In Pahl, K., & Rowsell, J. (Eds.). *Travel notes from the new literacy studies: Instances of practice* (Vol. 4). Bristol, UK: Multilingual Matters.
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American educational research journal*, 32(3), 465-491.
- Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: aka the remix. *Harvard Educational Review*, 84(1), 74-84.
- Lave, J. (2011). *Apprenticeship in critical ethnographic practice*. University of Chicago Press.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. London: Cambridge University Press.
- Lawrence-Lightfoot, S. (2008). *The good high school: Portraits of character and culture*.

- New York: Basic Books.
- Lemke, J. L. (2000). Across the scales of time: Artifacts, activities, and meanings in ecosocial systems. *Mind, culture, and activity*, 7(4), 273-290.
- Lerner, B. (2014). *10:04*. New York: Faber and Faber.
- Lerner, R.M. (1994). *America's youth in crisis: Challenges and options for programs and policies*. Thousand Oaks: Sage Publications.
- Levitt, P. (1998). Social remittances: migration driven local-level forms of cultural diffusion. *International Migration Review*, 926-948.
- Lewis, O. (1959). *Five families: Mexican case studies in the culture of poverty*. Austin: The University of Texas Press.
- Lopez, G. R. (2001). The Value of Hard Work: Lessons on Parent Involvement from an (Im)migrant Household. *Harvard Educational Review*. 71(3) 416-425.
- Lopez, N. (2003). *Hopeful Girls, Troubled Boys: Race and gender disparity in urban education*. New York: Routledge.
- Macey, D. (2000). The Penguin dictionary of critical theory. London: Penguin.
- Madison, D. S. (2012). *Critical ethnography: Method, ethics, and performance*. New York: Sage.
- Malsbary, C. B., Espinoza, S., & Bales, L. (2016). Liana's learning in a democratized classroom. *Pedagogies: An International Journal*, 11(3), 249-269.
- Marans, A. E., & Lourie, R. (1967). Hypotheses regarding the effects of child-rearing patterns on the disadvantaged child. In J. Hellmuth (Ed.), *Disadvantaged child* (Vol. 1, pp. 17-41). New York: Brunner/Mazel.
- Martinez, E., & Castellanos, M. (2018). Catching them early: An examination of Chicano/Latino middle school boys' early career aspirations. *The Urban Review*, 50(3), 378-401.
- Martinez, E., & Huerta, A. H. (2018). Deferred Enrollment: Chicano/Latino Males, Social Mobility and Military Enlistment. *Education and Urban Society*.
<https://doi.org/10.1177/0013124518785021>
- Marx, K., & Engels, F. (1968). *Karl Marx and Frederick Engels: selected works in one volume* (Vol. 184). International Publishers.
- McLaren, P. (1989). *Life in schools*. New York: Longman.
- Menchaca, M. (1997). Early racist discourses: Roots of deficit thinking. In R. R. Valencia (Ed.), *The evolution of deficit thinking: Educational thought and practice* (pp. 13-40). The Stanford Series on Education and Public Policy. London: Falmer.
- Mendoza-Denton, N. (2008). Homegirls: Symbolic practices in the making of Latina youth styles. *Maiden, MA: Blackwell*.
- Murillo, E. G. (1999). Mojado crossings along neoliberal borderlands. *Educational Foundations*, 13, 7-30.
- Murillo, E. G., & Villenas, S. (1997). East of Aztlán: Typologies of resistance in North Carolina communities. *Reclaiming Voices: Ethnographic inquiry and qualitative research in a postmodern age*, Los Angeles.
- Nelson, A. (2017). *Coding Freedom? Coding Academies and Narratives of Minority Advancement*. Unpublished manuscript. Retrieved from
<https://www.sas.upenn.edu/andrea-mitchell-center/sites/www.sas.upenn.edu/andrea-mitchell-center/files/Coding%20Freedom%20DCC.pdf#overlay-context=event/alondra->

nelson

- Noblit, G. W., Flores, S. Y., & Murillo, E. G. (2004). *Postcritical ethnography: Reinscribing critique*. New Jersey: Hampton.
- Noddings, N. (1984). *Caring: A Feminine Approach to Ethics and Moral Education*. Berkeley: University of California Press.
- Oakes, J. (1987). Tracking in secondary schools: A contextual perspective. *Educational Psychologist*, 22(2), 129-153.
- Ogbu, J. U. (1987). Variability in Minority School Performance: A Problem in Search of an Explanation. *Anthropology & Education Quarterly*, 18(4) 312-334.
- Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational researcher*, 41(3), 93-97.
- Paris, D., & Alim, H. S. (Eds.). (2017). *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world*. New York: Teachers College Press.
- Pérez, G. M. (2015). *Citizen, student, soldier: Latina/o youth, JROTC, and the American dream*. New York University Press.
- Pinola, M. (2013, December 5). Which programming language should I learn first? [Web log post]. Retrieved from <https://lifehacker.com/which-programming-language-should-i-learn-first-1477153665>
- Piore, M. J. (1979). *Birds of Passage: Migrant Labor and Industrial Societies*. Cambridge, UK: Cambridge University Press.
- Popova, M. (2015, February 9). Hope, Cynicism, and the Stories We Tell Ourselves [Web log post]. Retrieved from <https://www.brainpickings.org/2015/02/09/hope-cynicism/>
- Portes, A., & Rumbaut, R. G. (2001). *Legacies: The story of the immigrant second generation*. Berkeley: University of California Press.
- Putnam, R. D. (2000). Bowling alone: America's declining social capital. In *Culture and politics* (pp. 223-234). New York: Palgrave Macmillan.
- Ream, R. K., & Rumberger, R. W. (2008). Student engagement, peer social capital, and school dropout among Mexican American and non-Latino white students. *Sociology of education*, 81(2), 109-139.
- Rheingold, H. (Ed.). (2014). *The peeragogy handbook*. Chicago, IL./Somerville, MA.: PubDomEd/Pierce Press.
- Rios, V.M. (2011). *Punished: policing the lives of Black and Latino boys*. New York: New York University Press.
- Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. New York: Oxford University Press.
- Rong, X. L., & Preissle, J. (1998). *Educating Immigrant Students. What We Need To Know To Meet the Challenges*. Thousand Oaks: Sage Publications.
- Rymes, B. R. (2001). *Conversational Borderlands: Language and identity in an alternative urban high school*. New York: Teachers College Press.
- Rymes, B. (2010). Classroom discourse analysis: A focus on communicative repertoires. *Sociolinguistics and language education*, 528-546.
- Saenz, V. B., & Ponjuan, L. (2009). The Vanishing Latino Male in Higher Education. *Journal of Hispanic Higher Education*, 8(1), 54-89.
- Singer, A., Hardwick, S. W., & Brettell, C. (2008). *Twenty-first-century gateways: immigrant incorporation in suburban America*. Washington DC: Brookings Institution Press.

- Singer, N. (2017, May 13). How Google took over the classroom. *The New York Times*. Retrieved from <https://www.nytimes.com/2017/05/13/technology/google-education-chromebooks-schools.html>
- Smith, R. (2005). *Mexican New York: Transnational lives of new immigrants*. Berkeley: University of California Press.
- Snyder, T.D., & Dillow, S.A. (2010). *Digest of Education Statistics 2009* (NCES 2010 013). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.
- Solórzano, D. G. (1992). An exploratory analysis of the effects of race, class, and gender on student and parent mobility aspirations. *The Journal of Negro Education*, 61(1), 30-44.
- Solórzano, D. G., & Villalpando, O. (1998). Critical race theory, marginality, and the experience of students of color in higher education. *Sociology of education: Emerging perspectives*, 21.
- Solórzano, D. G., & Yosso, T. J. (2001). From racial stereotyping and deficit discourse toward a critical race theory in teacher education. *Multicultural education*, 9(1), 2.
- Solórzano, D. G., Villalpando, O., & Oseguera, L. (2005). Educational inequalities and Latina/o undergraduate students in the United States: A critical race analysis of their educational progress. *Journal of Hispanic Higher Education*, 4, 272- 294.
- Sowell, T. (1981). *Ethnic America: A history*. New York: Basic Books.
- Stanton-Salazar, R. D. (2011). A social capital framework for the study of institutional agents and their role in the empowerment of low-status students and youth. *Youth & Society*, 43(3), 1066-1109.
- Street, B. (1997). The implications of the 'New Literacy Studies' for literacy education. *English in education*, 31(3), 45-59.
- Street, B. (2003). What's "new" in New Literacy Studies? Critical approaches to literacy in theory and practice. *Current issues in comparative education*, 5(2), 77-91.
- Street, B. (2005). At last: Recent applications of new literacy studies in educational contexts. *Research in the Teaching of English*, 39(4), 417-423.
- Suárez-Orozco, C., & Suárez-Orozco, M. M. (1995). *Transformations: Immigration, family life, and achievement motivation among Latino adolescents*. Palo Alto, CA: Stanford University Press.
- Suárez-Orozco, C., Suárez-Orozco, M. M., & Todorova, I. (2008). *Learning a new land: Immigrant students in American society*. Cambridge, MA: Belknap Press of Harvard University Press.
- Suárez-Orozco, M. M., Suárez-Orozco, C., & Baolian Qin, D. (Eds). (2005). *The New Immigration: An Interdisciplinary Reader*. Routledge: New York.
- Taylor, T. L. (2012). *Raising the Stakes: E-sports and the Professionalization of Computer Gaming*. Cambridge, MA: Massachusetts Institute of Technology Press.
- Taylor, T. L. (2019). *Watch me play: Twitch and the rise of game live streaming*. New Jersey: Princeton University Press.
- Trueba, E. T. (1999). *Latinos Unidos: From cultural diversity to the politics of solidarity*. New York: Rowman & Littlefield Publishers.
- Turner, M. G. (1997). Knowledge displays outside the classroom. *Manuscript in preparation*. University of California, Los Angeles.
- Urban, G. (1996). Entextualization, replication, and power. *Natural histories of discourse*, 21-44.

- Urban, G. (2001). *Metaculture: How culture moves through the world* (Vol. 8). Minneapolis, MN: University of Minnesota Press.
- Urrea, L. A. (2004). *The Devil's Highway: A True Story*. New York, NY: Little Brown.
- Urrieta Jr., L. (2010). *Working from within: Chicana and Chicano activist educators in whitestream schools*. Tucson: University of Arizona Press.
- U.S. Census Bureau. (2010, April 1). *Quickfacts*. Washington, DC: U.S. Government Printing Office.
- Valdés, G. (1996). *Con respeto: Bridging the distances between culturally diverse families and schools: An ethnographic portrait*. New York, NY: Teachers College Press.
- Valencia, R. R. (Ed.). (1997a). *The evolution of deficit thinking: Educational thought and practice*. The Stanford Series on Education and Public Policy. London: Falmer.
- Valencia, R.R. & Black, M.S. (2002). "Mexican-Americans don't value education!" – on the basis of myth, mythmaking, and debunking. *Journal of Latinos and Education*. 1(2), 81-103.
- Valenzuela, A. (1999). *Subtractive Schooling: U.S.-Mexican Youth and the Politics of Caring*. New York: State University of New York Press.
- Vélez-Ibáñez, C., & Greenberg, J. (2005) In N. Gonzalez, L. Moll & C. Amanti (Eds.) *Funds of Knowledge: Theorizing Practices in Households, Communities, and Classrooms*. New Jersey: Lawrence Erlbaum Associates.
- Vertovec, S. (2007). Super-diversity and its implications. *Ethnic and racial studies*, 30(6), 1024-1054.
- Vieira-Pinto, A. (1960). *Consciência e realidade nacional* (Vol. 2). Ministerio da Educação e Cultura, Instituto Superior de Estudos Brasileiros.
- Villenas, S. (1996). The colonizer/colonized Chicana ethnographer: Identity, marginalization, and co-optation in the field. *Harvard educational review*, 66(4), 711-732.
- Villenas, S. (2001). Latina Mothers and Small-Town Racisms: Creating Narratives of Dignity and Moral Education in North Carolina. *Anthropology & Education Quarterly*. 32(1), 3-28.
- Villenas, S., & Foley, D. (2011). Critical Ethnographies of Education in the Latino/a Diaspora. In R. R. Valencia, *Chicano School Failure and Success: Past, Present, and Future*. New York: Routledge.
- Visser, M. (2012, April 2). Digital literacy definition [Web log post]. Retrieved from <http://connect.ala.org/node/181197>
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. New York: Cambridge university press.
- Wenger-Trayner, E., & Wenger-Trayner, B. (2011, December 8). What is a community of practice [Web log post]. Retrieved from <https://wenger-trayner.com/resources/what-is-a-community-of-practice/>
- Wenger-Trayner, E., Fenton-O'Creevy, M., Hutchinson, S., Kubiak, C., & Wenger Trayner, B. (Eds.). (2015). *Learning in landscapes of practice: Boundaries, identity, and knowledgeability in practice-based learning*. New York: Routledge.
- Willis, P. E. (1977). *Learning to Labor: How working class kids get working class jobs*. New York: Columbia University Press.
- Willis, P. E. (1981). Cultural production is different from cultural reproduction is different from social reproduction is different from reproduction. *Interchange*, 12(2-

- 3), 48-67.
- Willis, P. E., & Trondman, M. (2000). Manifesto for ethnography. *Ethnography*, 1(1), 5-16.
- Wortham, S. (2006). *Learning Identity: The Joint Emergence of Social Identification and Academic Learning*. New York: Cambridge University Press.
- Wortham, S., Murillo, E. G., & Hamann, E. T. (Eds.). (2002). *Education in the New Latino Diaspora: Policy and the politics of identity* (Vol. 2). Greenwood Publishing Group.
- Wortham, S., & Rymes, B. (Eds.). (2003). *Linguistic anthropology of education*. Santa Barbara, CA: Praeger Publishers.
- Yosso, T.J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race, Ethnicity, and Education*. 8(1), 69-91.
- Yosso, T., & Solórzano, D. (2006). *Leaks in the Chicana and Chicano educational pipeline* (Latino Policy & Issues Brief No. 13). Los Angeles: UCLA, Chicano Studies Research Center.
- Zavella, P. (2011). *I'm Neither Here Nor There: Mexicans' Quotidian Struggles with Migration and Poverty*. Durham, N.C.: Duke University Press.
- Zentella, A. C. (2003). José, can you see?. In *Bilingual games* (pp. 51-66). New York, NY: Palgrave Macmillan.